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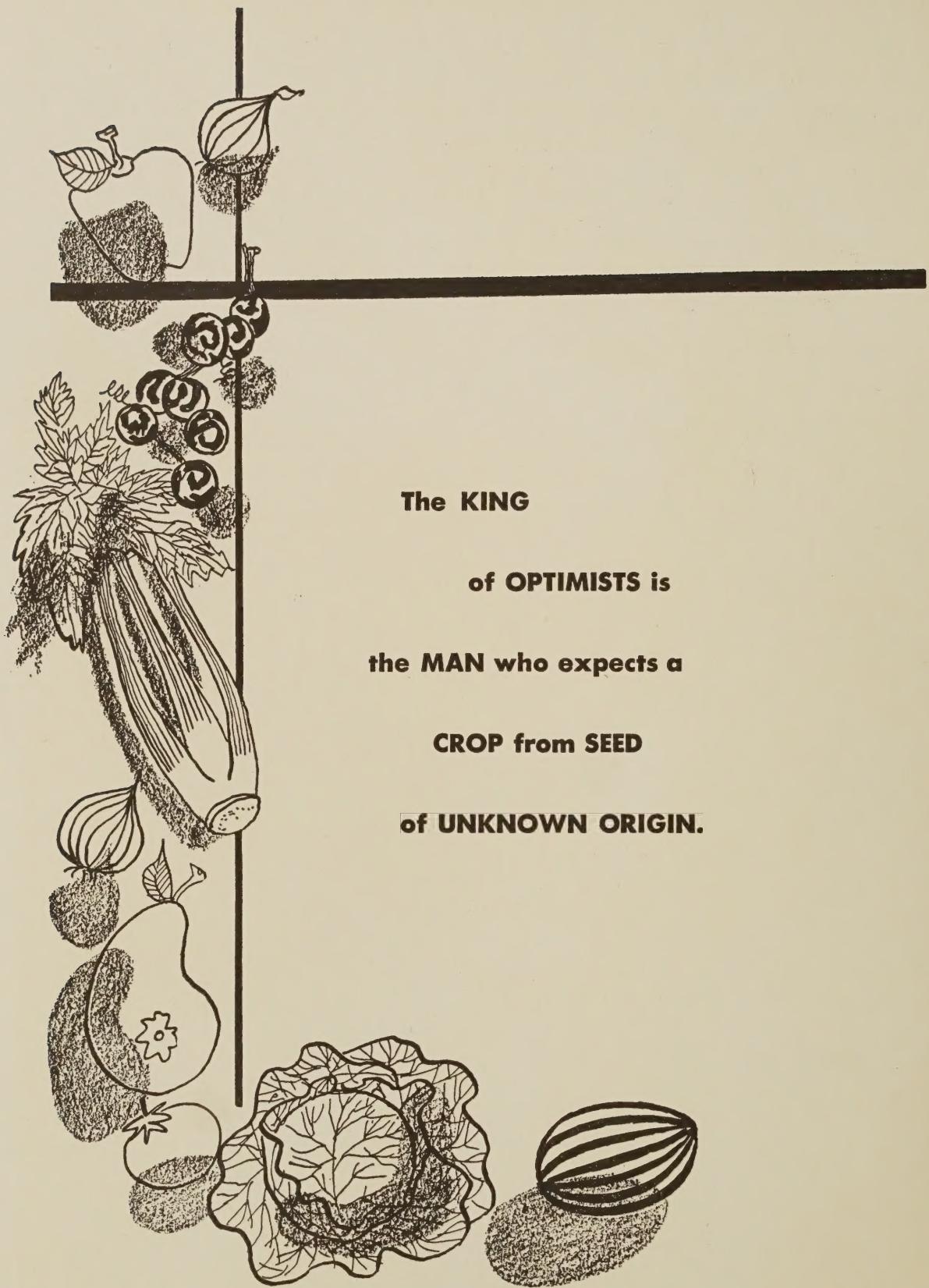


St. Louis, Mo.

Gardener's HANDBOOK

FOR BIGGER
AND BETTER
CROPS





SYMBOLS...

Symbolic of the care and precision exercised in field testing and evaluating strains is this photograph of pea trials on one of our Twin Falls, Idaho, breeding farms. New varieties are originated and tested. Each lot and each strain of existing varieties is tested and evaluated. Many thousands of test plots are grown and observations recorded annually in the West and at Keystone Valley Farm near St. Louis. This work proceeds ceaselessly so that you as a user of Keystone seeds may be sure of the best.

Symbolic of the more than 100 years of continuous seed service to agriculture by our company and its immediate predecessors is the Keystone emblem which stands as your protection and assurance of supreme quality and value.





ALL AMERICA SELECTIONS

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This is an organization set within the scope of the American Seed Trade Association, and whose purpose is to encourage the development and introduction of new, improved vegetable (and flower) varieties. To this end, a panel of judges is elected from among the seed industry; each year, all judges see and evaluate the same entries and vote on each one according to their opinion of its value either for home gardens, commercial use, or both. The votes are then assembled and varieties are given awards (Gold Medal, Silver Medal and Bronze Medal) if the number of votes and other considerations justify.

Vegetable varieties that have received All America awards are indicated in the descriptive section of this catalog.



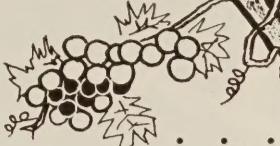
Sweet Banana Pepper
All-America Bronze Medal
Winner in 1941

Seminole Bush Bean
All-America Silver Medal
Winner for 1955

KOHLRABI	17	POPCORN	15
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LIVE FROM A

GARDEN



... THE WHOLE YEAR ROUND

Fresh vegetables. Nothing quite equals the taste sensation, the appealing goodness, of corn on the cob popped into a steaming pan the minute after it is picked from your own garden—or carrots the size of your finger, discarded by the commercial grower at thinning time, but saved from your carrot patch, cooked to perfection and drowned in butter—or your own green peas, picked at the fleeting moment of perfection and prepared according to your favorite recipe—or any of the hundreds of other vegetables described in this catalog, freshly picked, cooked and served. Your own garden planning, your own labor, your own bountiful crops—all combine to give you and your family a real treat at every meal time, summer and winter.

Fresh flowers. A vegetable garden is an ideal spot in which to grow flowers for bouquet and corsage purposes, thus leaving intact the border or flower bed that was planned—and planted—for its entire overall contribution to the beauty of your home. Flowers suitable for a variety of purposes are listed in this catalog (see index), and complete cultural directions are given so that your home will be the beauty spot of the neighborhood.

Fresh approach to today's high prices. Canning and freezing the vegetables from your own garden will give you a delicious, healthful way to keep the food section of your budget in line. A few dollars for the proper tools, a few cents for fertilizer (an investment well repaid in the form of higher yields, more nutritious crops), and a few cents for seed (remember: the best seed costs no more than inferior quality seed, and Keystone seed is the best) is all the capital you'll need to get started on the most rewarding enterprise of your life—health, recreation, and contentment for the whole family—and the more it becomes a **family** undertaking, the greater will be the return on the investment.

Home preservation of vegetables.

To make the fullest, most economical utilization of the garden, surplus vegetables may be canned or frozen by the gardener. Better still, the garden should be planned to yield a certain surplus just for this purpose. The pleasure of eating the products of your own labor can thus be enhanced, and extended throughout the winter months.

Canning has long been the standard method of home preservation of foods. Even today, canning is still the best method for certain fruits and vegetables. Directions for successful home canning are beyond the scope of this gardening guide, but are given in detail in cook books, pamphlets put out by glass jar companies, etc.

Home freezing has more recently come into the spotlight, and offers many well-known advantages.

The accepted method of preparing vegetables for freezing, following washing and cutting into proper sizes, is blanching. This is an easy but important step, as it stops enzyme action within the plant tissue; otherwise such action often continues even under cold conditions to alter the flavor, color or consistency of frozen fruits or vegetables.

Following is a brief guide to the vegetable varieties best adapted for home freezing, and a note on the blanching time for each one.

Incidentally, U. S. D. A. statistics indicate that people who have their own gardens at home are, relatively speaking, larger purchasers of fresh produce at the market than non-gardeners—seems they are more appreciative of the extra value, both in money and flavor, of fresh vegetables.

FREEZING SUGGESTIONS*

Vegetable and varieties	Blanching Period
Asparagus: Mary Washington	Small stalks 2 mins. Large stalks 4 mins.
Beans: Commodore Improved, Full Measure, Giant Stringless, Seminole, Tendergreen, Topcrop, Wade, Puregold Wax, Blue Lake, Kentucky Wonder pole	Small 2 mins. Large 3 mins.
Beans, Lima: Allgreen, Fordhook 242, Henderson's Bush	Small 2 mins. Large 3 mins.
Beans, Edible Soy: Bansei	2 to 3 mins.
Beets, Detroit Dark Red	Cook until soft, remove skins.
Broccoli: All green sprouting varieties	3 to 4 mins.
Cauliflower: Snowball, others	3 to 4 mins.
Sweet corn, on cob: Corneli's Gold Rush, Prosperity, Golden Cross, KVF 50-15	3 to 5 mins.
Sweet corn, cut: Same varieties as on cob	3 mins.
Okra: Emerald, Clemson Spineless	4 mins.
Peas: Alderman, Freezonian, Glacier, Laxton's Progress, Thomas Laxton	2 mins.
Peas, Southern or Table: Dixielee, Purple Hull 49, Texas Cream	2 mins.
Rhubarb: Victoria	1 min.
Spinach: New Zealand and all Savoy types	2 mins.
Swiss Chard: All varieties	2 mins.

*For a very complete source of information on food freezing, write the Kansas State Agricultural Experiment Station, Manhattan, Kansas, for a copy of Circular 249, March, 1949, entitled "Preserving Foods by Freezing."

It goes without saying that vegetables to be used for home preservation should be ripe and in sound condition; this is especially true for freezing—blemished, immature or over mature products will lose appearance and flavor much more quickly in storage than sound, ripe fruits or vegetables.





GENERAL CULTURAL DIRECTIONS

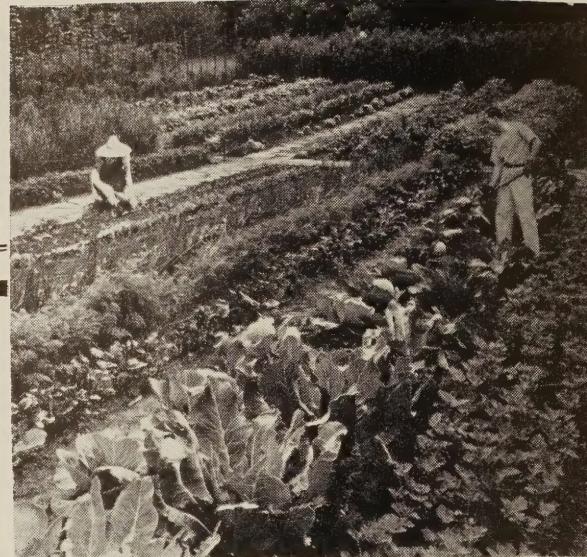
Where to Put the Garden?

Although the answer to this question depends to a certain degree on the section of the country in which the gardener is located, as well as considerations such as the location of his house on the lot, whether it slopes to the north or south, his plans for shrubbery and flower beds, etc., a few generalizations or suggestions can nevertheless be made.

The handiest location, and one which makes for easier working and harvesting, is close to the house, preferably on the kitchen side. Small to medium sized gardens can be enclosed and screened by stockade fencing, fruit arbors, or hedges, and thus remain close to the house without detracting from the appearance of the surroundings.

However, the major factor in deciding where to put the garden is the selection of the best soil available; often, the soil excavated from the basement is graded up close to the house, and this might make it undesirable to have the garden too close to the house if the excavated soil were clayey, stoney or otherwise unproductive.

A loam soil, i.e., one containing relatively equal parts of the sand, silt and clay constituents that make up soils, is preferable, but soils running to the silty, sandy or clayey side, in that order, are just as good. In the final analysis, if you want a garden, you will have to put it on whatever soil makes up your yard. However, if a choice is available, such as on suburban properties or farms, the richer, not too sandy or clayey soils will provide the best garden site.



Incidentally, farm families will be wise to consider the possibility of putting their vegetable gardens at the end of a cultivated piece of ground near the house, and spacing the vegetable rows so that they can be cultivated with the regular tractor equipment. This makes it possible to have a larger garden and, at the same time, eliminate a very large share of the hand labor usually associated with larger home gardens. A long, narrow plot fits this plan very well.

In any case, the spot chosen for the garden should be well fertilized in advance of plowing or spading; after it is plowed, the soil should be disced and harrowed, or otherwise worked up to a very fine, smooth, clod-free condition. The application of generous quantities of stable manure three or four weeks before planting time will benefit the soil by supplying needed organic matter.

Your seed dealer will be able to advise you as to the kind and amount of fertilizer to apply. For a more accurate indication of just what additional nutrients your soil needs, consult your county agricultural agent on how to go about having a soil analysis made.

How Big a Garden is Needed?

The space available will help determine this point, but for a minimum amount of variation in the vegetables raised, a space of about 15 feet by 25 feet should be thought of as a minimum. 50 feet x 50 feet, on the other hand, will produce a balanced vegetable diet for four people and include such space-consuming crops as sweet corn, pumpkins and squash. (See diagrams on p. 6)

What Should We Plant?

Family preference will have a lot to do with this, but as many different kinds as possible should be planted to assure a variety of flavors for the table, as well as a complete supply of vitamins and minerals.

One should also choose varieties with different rates of maturity, so that early maturing crops, such as radish, mustard, peas and spinach can be planted on ground to be occupied later by crops such as corn, cabbage, squash, etc. Such crops can often be interplanted, so that the early maturing ones will be harvested by the time the later, larger plants of corn, squash, and so on, begin to spread out. Economies of space thus gained are considerable.

When to Plant?

The following map is divided into zones according to the average date of the last killing frost in each zone. One month previous to this date has been selected as the Planting Date for the respective zone. On this date seeds of hardy varieties may be sown outdoors; hardy plants may be transplanted; and tender varieties may be started under protection.

Miscellany—

Space savers — Succession planting and interplanting of various kinds of vegetables are mentioned elsewhere on this page. Another space saver is the training of cucumber vines on wires or fences. Not only does this save space, but it makes the fruit easier to pick and helps prevent

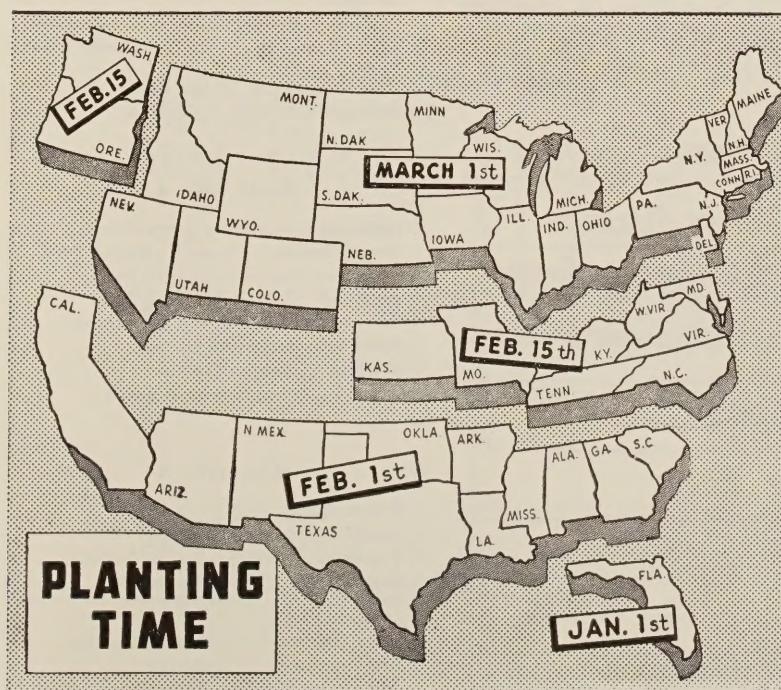
some leaf diseases. Staking of tomatoes is a commonly-used space saver. Our garden plans, which follow, indicate many of these space saving ideas.

Better corn — For fully developed ears, corn should be planted in plots of 3 or more rows. Avoid single or even double row plots if at all possible, as the ears are often very poorly pollinated in such plantings. In making successive plantings of sweet corn, keep in mind that the time between planting dates should be about twice as long as the difference wanted between harvest dates. As the season warms up, the corn grows faster and the later planted corn tends to "catch up" with the earlier plantings.

Another suggestion — do not waste half your seed by losing it to soil fungi or insects; this brings up the subject of . . .

Seed treatment — Materials are now available which are relatively non-poisonous to handle and which give the seed complete protection against both soil insects and diseases. Your dealer can supply more information on this important subject.

Weed control — Chemical weed control is no longer in the experimental or "commercial grower" stages—home and roadside gardeners will find it very easy to obtain good results and eliminate much of the labor of early cultivations by use of the several "pre-emergence" or "post-emergence" materials now available. Cucurbits, beans, corn, leaf crops and perennials such as asparagus and strawberries are especially adaptable to "chemical weeding."



If there are children in your family, a small garden just for them is very educational and worthwhile, using short rows of easy to grow plants such as peas, beans, corn, carrots and tomatoes. They will really enjoy having a garden of their very own, especially if parental supervision is held to the necessary minimum.

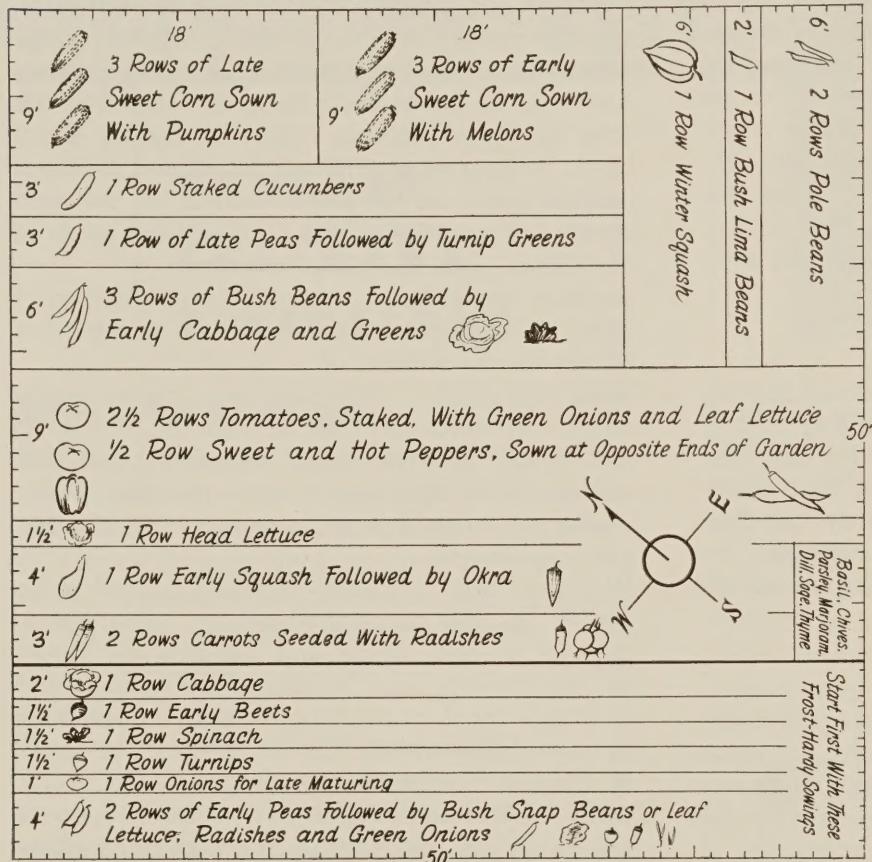
* * *

The diagrams and planting suggestions on page 6 can serve as starting points for your own garden planning, taking into consideration the various points mentioned above.

The diagrams below are carefully planned for maximum production of foods for a balanced diet. Varieties suggested will produce vegetables throughout an entire season with some that are resistant to early freezes. Plan for intercropping and succession cropping too so your garden will be working full time and give maximum production. Since the exact size and shape of the garden must conform to the space available, each plot is an individual project in layout. These plans are offered as a sound starting point.

A SUGGESTED 50'x50' GARDEN

Plan No. 1



Preferences in foods vary with each family, therefore, varieties to be planted and length of rows should be adjusted accordingly to individual tastes. Plans No. 3, No. 4, and No. 5 (below) offer some alternate planting ideas.

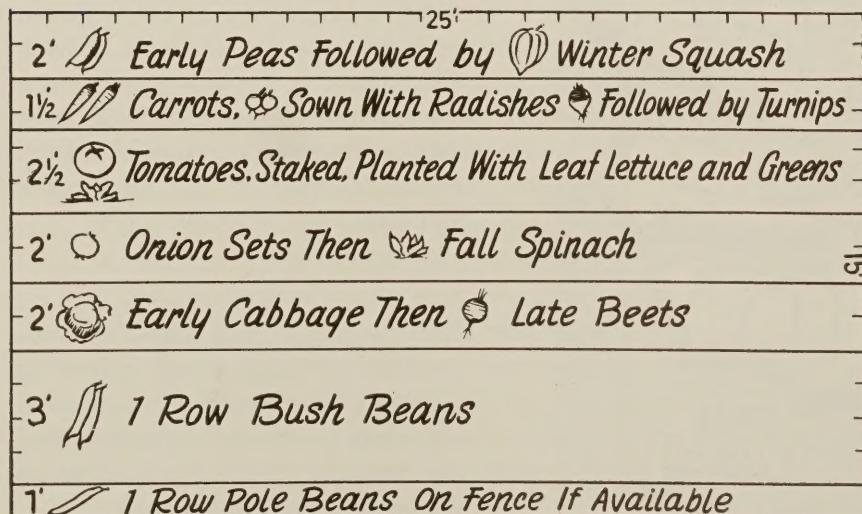
PLAN NO. 1 will produce a balanced diet for a family of four. Notice that corn is planted in a square plot instead of a lengthy single row; this provides a better chance for pollination which is very important in producing maximum yields. Remember to plant the tall growers to the north so they won't shade the low growers. Climbing vine crops and tomatoes can be tied to adjoining fences thus saving space and staking work.

PLAN NO. 2 provides a good variety of foods, however, for space conservation this small garden has no sweet corn.

PLANS FOR PLANTING A GARDEN

PLAN FOR A 25'x15' GARDEN

Plan No. 2



PLAN NO. 4

- 1 Radishes followed by Sweet Corn
- 2 Green Onions followed by Sweet Corn
- 3 Tomatoes interplanted with Peas
- 4 Tomatoes interplanted with Peas
- 5 Early Cabbage followed by Turnips
- 6 Beets followed by Cabbage
- 7 Potatoes or Onion Sets
- 8 Carrots followed by Bush Beans

PLAN NO. 5

- 1 Sweet Corn
- 2 Radishes followed by Sweet Corn
- 3 Tomatoes interplanted with Lettuce
- 4 Early Peas . . . mid-season Peas . . . late Peas (1/3 row each, planted at 2-week intervals)
- 5 Early Cabbage followed by Turnips
- 6 Beets followed by Cabbage
- 7 Carrots followed by Bush Beans

VEGETABLE CROPS PLANTING CHART

KIND	Seeds for 100 ft. row	Seed for 1 Acre			Distance between Rows	Plants apart in rows	Depth of planting	Time of planting in open ground		Ready for use from date of seeding
		Drilled in Field	1 ft. Trans- planted	Machine Cultivation				South	North	
		†Approximate rate of seeds per pound								
Asparagus, seed	1 oz.	5 lbs.	1 lb.	22400	30 to 36 in.	18 to 24 in.	3 in.	Autumn or early spring	Early spring	1 or 2 yr. (plants)
Asparagus, root	10 oz.	5 lbs.	1 lb.	22400	30 to 36 in.	4 ft.	10 in.	Autumn or early spring	Early spring	2 years
Beans, dwarf	1 oz.	60 lbs.	1 lb.	1200	30 to 36 in.	18 to 24 in.	4 in.	Feb., April, Aug., Sept.	April to July	42 to 75 days
Beans, pole	1/2 lb.	30 lbs.	1 lb.	1200	3 to 4 ft.	3 to 4 ft.	3 in.	Late spring	May to June	65 to 90 days
Beer (& Swiss Chard)	1 oz.	10 lbs.	1 lb.	1500	28 to 36 in.	12 to 18 in.	2 in.	Feb., April, Aug., Sept.	April to August	45 to 60 days
Bee, Water & Sugar	1 oz.	5 lbs.	1 lb.	24000	28 to 36 in.	20 in.	0 to 2 in.	Feb., April, Aug., Sept.	April to August	90 to 120 days
Broccoli	1/4 oz.	2 lbs.	1 lb.	1200	30 to 36 in.	18 to 24 in.	10 in.	Feb., April, Aug., Sept.	April to August	90 to 120 days
Brussels Sprouts	1/4 oz.	2 lbs.	1 lb.	1200	30 to 36 in.	24 to 30 in.	16 to 19 in.	Jan. to July	June and July	100 to 120 days
Cabbage, Chinese	1/4 oz.	2 lbs.	1 lb.	15200	30 to 36 in.	18 to 24 in.	12 to 18 in.	July and August	July and August	75 days
Cabbage, early	1/4 oz.	2 lbs.	1 lb.	12000	30 to 36 in.	24 to 30 in.	12 to 18 in.	Oct. to Dec.	Mar. and Apr.	90 to 110 days
Cabbage, late	1/4 oz.	2 lbs.	1 lb.	12000	30 to 40 in.	24 to 36 in.	10 to 12 in.	June and July	July and June	110 to 120 days
Cannabis, musk (hemp)	1/2 oz.	3 lbs.	1 lb.	1800	6 to 8 ft.	every 4 ft.	1 in.	Feb. to April	April to June	85 to 150 days
Carrot	1/2 oz.	3 lbs.	1 lb.	32000	30 to 36 in.	12 to 18 in.	4 in.	Mar. and Apr., Sept.	April to June	55 to 80 days
Cauliflower	1/4 oz.	2 lbs.	1 lb.	12000	30 to 36 in.	18 to 30 in.	4 to 10 in.	Jan. and Feb. (June)	June and July	95 to 110 days
Celeri	1/4 oz.	1 lb.	1 lb.	12000	30 to 36 in.	18 in.	4 in.	Aug. and Oct.	May and June	120 to 150 days
Chicory, Witloof	1 oz.	4 lbs.	1 lb.	25000	30 in.	24 in.	0 to 10 in.	Feb. to April	April to June	100 days
Chicory, Magdeburg	1 oz.	4 lbs.	1 lb.	120000	30 to 36 in.	24 to 30 in.	14 to 10 in.	March to July	April to June	100 days
Collards	1/4 oz.	2 lbs.	1 lb.	480000	30 to 36 in.	12 to 18 in.	3 in.	May and June	Late Spring	100 to 120 days
Corn, Salad	1/2 oz.	3 lbs.	1 lb.	35200	36 to 42 in.	30 to 36 in.	4 to every 3 in.	July and August	June and July	60 to 90 days
Corn, sweet	1/4 lb.	10 lbs.	1 lb.	240000	Broadcast	4 to 6 ft.	1 in.	Feb. to April	April to June	55 to 90 days
Cucumber	1/2 oz.	3 lbs.	1 lb.	16000	4 to 6 ft.	24 to 30 in.	18 in.	Feb. and Mar. (Sept.)	April to Sept.	50 to 70 days
Eggplant	1/8 oz.	2 lbs.	1 lb.	96000	30 in.	24 to 30 in.	18 in.	Feb. to April	April and May	125 to 140 days
Endive	1 oz.	4 lbs.	1 lb.	240000	30 in.	18 in.	12 in.	Oct. to Feb.	April (July)	100 days
Kale or Borecole	1/4 oz.	3 lbs.	1 lb.	14400	30 to 36 in.	18 to 24 in.	8 in.	Sept. to May	March to May	55 to 60 days
Kohlrabi	1/4 oz.	4 lbs.	1 lb.	135000	30 to 36 in.	18 to 24 in.	9 in.	Sept. to May	May to July	55 to 90 days
Leek	1/2 oz.	4 lbs.	1 lb.	176000	30 to 36 in.	14 to 20 in.	4 in.	Leek	April to Sept.	50 to 70 days
Lettuce	1/4 oz.	3 lbs.	1 lb.	32000	30 in.	12 to 18 in.	6 in.	Sept. to March	March to Sept.	50 to 70 days
Mustard	1/4 oz.	4 lbs.	1 lb.	288000	30 to 36 in.	12 to 18 in.	4 or 5 ft.	Autumn or early spring	March to May (Sept.)	60 to 90 days
Ora	2 oz.	8 lbs.	1 lb.	7200	4 to 5 ft.	3 to 4 ft.	1 in.	Feb. to March	May and June	90 to 140 days
Onion, seed	1 oz.	4 lbs.	1 lb.	120000	24 to 35 in.	12 to 18 in.	2 in.	Oct. to March	April to May	125 to 150 days
Onion, sets	1 qt.	12 bu.	1 lb.	12000	24 to 36 in.	12 to 18 in.	2 in.	Autumn or early spring	Feb. to May	100 days
Onion, seed for sets	1 lb.	50 lbs.	1 lb.	12000	24 to 36 in.	12 to 18 in.	1/2 in.	Sept. to May	April	90 days
Parley	1/4 oz.	3 lbs.	1 lb.	24000	24 to 36 in.	12 to 18 in.	3 in.	Sept. to May	Early spring	65 to 90 days
Parsnip	1/2 oz.	3 lbs.	1 lb.	11200	30 to 36 in.	18 to 24 in.	2 in.	Sept. to April	March to April	130 days
Parsnips	1/2 oz.	150 lbs.	1 lb.	2000	3 to 4 ft.	1 in.	2 in.	Sept. to April	March to June	45 to 75 days
Pear, Crowder	1/2 lb.	25 lbs.	1 lb.	2800	3 to 4 ft.	3 ft.	4 to 6 in.	Sept. to April	March to June	45 to 75 days
Pepper	8 oz.	2 lbs.	1 lb.	72000	30 to 36 in.	18 to 24 in.	15 in.	Early spring	May and June	100 to 110 days
Pumpkin	1/2 oz.	2 lbs.	1 lb.	12000	24 to 36 in.	3 to 12 ft.	4 every 6 ft.	April and May	May and June	130 to 150 days
Radish	1 oz.	10 lbs.	1 lb.	64000	24 to 36 in.	12 to 18 in.	1 in.	Sept. to April	May to July	75 to 90 days
Rhubarb, seed	1/2 oz.	8 lbs.	1 lb.	32000	30 to 36 in.	18 to 24 in.	4 in.	Sept. to April	March to Sept.	20 to 75 days
Rhubarb, roots	40 oz.	40 roots.	1 lb.	3500	5 ft.	1 ft.	1 ft.	Autumn or early spring	Early spring	1 or 2 yr. (plants)
Ruta, baga	1/4 oz.	2 lbs.	1 lb.	64000	30 to 36 in.	18 to 24 in.	6 in.	Autumn or early spring	Early spring	2 or 3 years
Salsify	1 oz.	8 lbs.	1 lb.	48000	30 to 36 in.	18 to 24 in.	2 in.	Autumn or early spring	Early spring	90 days
Soy Beans, Vegetable	1/2 lb.	30 lbs.	1 lb.	1920	30 to 36 in.	16 to 36 in.	2 in.	April-May-June	May to July	150 days
Spinach	1/2 oz.	12 lbs.	1 lb.	48000	30 to 36 in.	12 to 18 in.	1 in.	Sept. to March	March to Sept.	150 days
Squash, summer	2 oz.	4 lbs.	1 lb.	4800	3 to 4 ft.	4 every 4 ft.	1/2 in.	Early Spring	Early spring	45 days is min.
Squash, winter	2 oz.	2 lbs.	1 lb.	2000	7 to 10 ft.	7 to 10 ft.	1 in.	Autumn or early spring	Early spring	65 to 70 days
Tomato, Pelleted	1 oz.	6 lbs.	1 lb.	16000	3 to 5 ft.	3 to 4 ft.	1 in.	Aug. and Sept.	June-July	125 to 150 days
Turnip, for greens	1/2 oz.	9 lbs.	1 lb.	20800	24 to 36 in.	3 to 4 ft.	2 in.	Early Spring	Early spring	90 to 120 days
Watermelon	1 oz.	3 lbs.	1 lb.	20800	24 to 36 in.	18 to 24 in.	1 in.	Sept. to Oct.	Aug. to Oct.	45 to 90 days
	1 oz.	3 lbs.	1 lb.	360	8 to 12 ft.	4 every 6 ft.	1 in.	April and Aug.	April and Aug.	45 to 50 days
								May and June	May and June	100 to 130 days

†The number of seeds per pound varies widely between varieties and lots of same species, but figures given are approximately average

ASPARAGUS

Sow the seed in the spring and thin plants to four inches apart in the row. The roots can be moved the following spring into four foot rows, 18 inches apart in the row. The new method for growing green asparagus is to plant the roots with the crown only one inch or two below the surface of the soil. The bed should be well fertilized. Light cutting should be made during the second season, and normal harvest started the third year.

CALIFORNIA 500 (Rust Resistant)—A new, uniform, vigorous strain of the Washington type, producing thick, succulent spears.

MARY WASHINGTON (Rust Resistant)—One of the fine rust resistant strains developed by the USDA. Produces an abundance of large, early shoots of rich dark green color.



BLACK VALENTINE STRINGLESS

BLACK VALENTINE STRINGLESS or AS-GROW BLACK VALENTINE—Our strain of this fine variety is planted extensively by shippers and market gardeners. Very productive of fine quality pods. Pods 6 1/2 to 7 inches long, slender, thick-oval, almost straight, stringless, medium green. Seed jet black. AAS S.M. 1933.

BOUNTIFUL—Used by shippers and in home and market gardens; the earliest of the flat pod varieties. Pods 6 1/2 to 7 inches long, thick-flat, tender and of good quality; light green. Seed yellow with dark brown eye-ring.

BURPEE'S STRINGLESS IMPROVED or LANDRETH STRINGLESS or STRINGLESS GREEN-POD—Standard variety, widely used in home and market gardens. Pods 5 1/2 to 6 inches long, medium dark green, slightly curved, stringless, fiberless, and of excellent quality. Seed brown with black eye-ring.

COMMODORE IMPROVED—Developed by us from regular Commodore for improved uniformity, texture and pod length. Pods 7 1/2 to 8 1/2 inches long, round, stringless, of finest quality. Pod appearance resembles Kentucky Wonder. Seed reddish purple. AAS H.M. 1945.

CONTENDER—Resistant to common bean mosaic, powdery mildew and adverse growing conditions. Widely adapted and a good yielder; a fine market bean. Pods thick oval, nearly round, 7 inches long, stringless, tender, almost fiberless. Seed buff with brown mottling.

DWARF HORTICULTURAL or **RUBY DWARF**—Grown chiefly for green shelled beans. Pods 4 1/2 to 5 inches long, nearly round, stringless but fibrous, light green turning white and crimson. Seed color buff and maroon, brown eye-ring.

FULL MEASURE—A high quality bean especially adapted to the warmer states. Pods 6 to 6 1/2 inches long, straight, round, fleshy, stringless and tender. Seed reddish brown.

GIANT STRINGLESS—Standard variety widely used in the South. Pods 6 to 6 1/2 inches long, of excellent quality, stringless, fiberless, round, fleshy. Seed yellowish brown with brown eye-ring.

PLENTIFUL—Designed for the shipping trade. Pods 7 to 7 1/2 inches long, thick, flat, nearly straight, stringless. Seed black. AAS B.M. 1939.

RED VALENTINE STRINGLESS—Used mostly in home gardens. Pods 4 1/2 to 5 inches, small, curved, round, stringless, and tender. Seed mostly red.

REFUGEE, U.S. NO. 5 (Mosaic Resistant)—Released by the USDA; much superior to the old Refugees. Resistant to common mosaic. Pods 4 1/4 inches long, round, straight, tender, stringless, very fine quality. Seed mottled purplish brown.

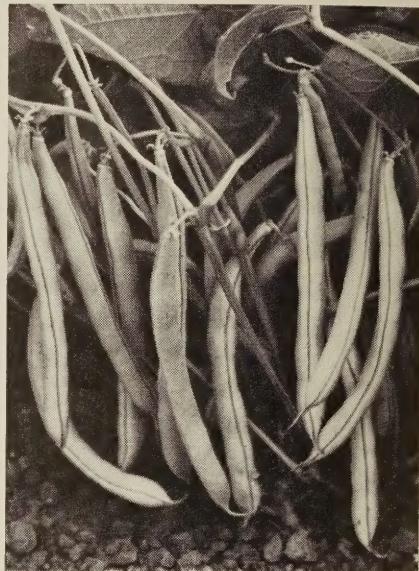
SEMINOLE—A new, refined Tendergreen type developed by the Florida Experiment Station. Pods are long, straight, slender, of attractive emerald green color, and stringless, with excellent beany flavor. Has rated very high in commercial canning, freezing and shipping trials. Plants upright, sturdy; resistant to mildew, rust, and common bean mosaic. Seed mottled purple and tan. AAS S.M. 1955.

STREAMLINER or **GRANDA**—A good home garden and early market sort. Pods 7 1/2 to 8 inches long, slender, slightly curved, flat; usually picked at young stage. Seed white, suitable for use as dry edible beans. AAS S.M. 1939.

SULPHUR—Adapted to the South for early market and home use. Pods 4 1/2 to 5 inches long, plump, slightly curved, stringy. Seed sulphur yellow, brownish eye-ring.

STRINGLESS HORT—We developed this Horticultural type for use as a green stringless snap bean, and also as a green shelled bean, and finally as a dry bean. It is excellent for each purpose. Pods 5 to 6 inches long, nearly round; tender and meaty when young, stringless. Seed buff with reddish brown spots. AAS H.M. 1952.

TENDERGREEN—The leading all purpose roundpod stringless bean for home and market gardeners, shippers, canners and freezers. A beautiful bean with excellent qualities. Pods 6 to 6 1/2 inches long, round, straight, stringless and tender. Seed brownish purple on fawn field. AAS G.M. 1933.



WADE

TENDERLONG 15—A recent introduction of the Tendergreen type with some resistance to mosaic and powdery mildew. Pods 6 to 6 1/2 inches long, round, straight, and stringless with fine flavor and quality. Seed dark purple on buff field.

TENDERPOD—High quality, for home and market garden. Well adapted for home freezing. Pods 5 to 5 1/2 inches long, round, dark green, stringless, fiberless, and tender. Seed white with reddish spot on either side of eye. AAS B.M. 1939.

TENNESSEE GREEN POD—Very popular in the South; extremely early. Pods 6 to 7 inches in length, broad and flat, stringy and fibrous; good flavor. Seed yellowish brown.



TOPCROP

Beans

Beans are a tender warm season crop and do best in a light, warm soil. They should be adequately fertilized. The first crop should be planted in late spring, followed by successive plantings every three weeks.

Sow the bush varieties in rows two feet apart and four inches apart in the row.

For pole beans, plant five or six beans in a hill, the hills spaced three feet by four feet. After the plants are established, a pole should be set firmly in each hill.

All varieties should be planted about one and one-half inches deep. Cultivate frequently but lightly when the vines are dry, not early in the morning or following a rain.



POLE BEAN, KY. WONDER

TOPCROP—Developed by the USDA. Highly resistant to the virus diseases "greasy pod" and common bean mosaic. Widely adapted, and a very high yielder. Pods 6 inches long, stringless, fiberless, round, little larger than Tendergreen. Seed tan mottled over brown. AAS G.M. 1950.

WADE—A new variety developed by the late Dr. B. L. Wade of the U.S.D.A. The unusual dark emerald green pod color distinguishes it from other recent introductions. Resistant to common bean mosaic; should become a shipping and garden favorite. Pods 6½ inches in length, stringless, smooth, round and tender. Seed dark reddish brown.

WHITE HALF RUNNER (Old Dutch Runner)—Popular in the mountain areas of the mid-south and southeast; used mainly for snap and shelled beans. Pods 4 inches long, round, stringy and fibrous at full size, but of distinctively good flavor. Seed white.

Bush Wax Pod Varieties

BRITTLE WAX or **ROUND POD KIDNEY WAX**—A leader and standard in the wax pods. Widely used in home gardens and adapted for freezing. Pods 6 to 6½ inches long, stir-gloss and fiberless, round, brittle, fleshy and light yellow. Seed white with dark irregular eye-ring.

CHEROKEE WAX—Developed from a selection out of Black Valentine Stringless; probably the most prolific of the wax-podded varieties. Pods 6½ to 7 inches long, oval, stringless and tender. Seed black.

GOLDEN WAX, TOP NOTCH—Superior to the old type Golden Wax for its productivity, hardiness, and length of pods. Pods 5 to 5½ inches long, thick flat, light golden yellow, stringless, tender, very uniform. Seed white with irregular brown eye-ring.

PENCIL POD BLACK WAX—Popular in home and market gardens. Highly dependable, fine quality. Pods 6 to 6½ inches long, golden yellow, round stringless, tender and brittle. Seed black.

Field Beans

GREAT NORTHERN—One of the more important dry edible commercial beans grown.

Our stocks are resistant to common bean mosaic; early. Short runners. Pods 3½ to 4 inches long, flat, stringy and tough, not edible. Seed entirely white; larger and more flattened than navy.

PINTO—Of considerable commercial importance as a dry edible bean for making chili. Pods 3½ to 4 inches long, flat, stringy and tough, not edible. Seed light buff with brown splashes; broad oval.

RED KIDNEY (Dark)—A beautifully colored bean of fine edible qualities. Does nicely in home gardens. Bush type plants. Pods 5 to 5½ inches long, broad oval, stringy, fibrous, not edible. Seed color, dark rich red, flattened kidney shape.

WHITE KIDNEY—A bush type producing large beans of fine dry shelled quality. Pods 5½ to 6 inches long, stringy, fibrous, flat, not edible. Seed color, entirely white, flattened kidney shape.

WHITE NAVY (Michelite)—The most widely known and grown of the commercial beans. We are now supplying the newest and finest strain; resistant to common bean mosaic and bacterial blight. Pods 3½ inches long, flat, not edible. Seed entirely glossy white, small, oval.

Pole Green Pod Varieties

ALABAMA NO. 1—Resistant to nematodes or root knot. A creaseback type, with purple tinged stems. Pods 6½ inches long, purple tinged, round, almost straight. Seed black.

BLUE LAKE or **WHITE CREASEBACK IMPROVED**—A selection of White Creaseback, of high quality. 5 to 6 feet tall. Pods 5½ to 6 inches long, stringless when young, round, brittle. Seed white; make good dry-shelled beans.

BLUE LAKE STRINGLESS—Fulfills the demand for a stringless pole bean of high quality. Very productive vine, resistant to common bean mosaic and some forms of rust. 6 feet tall. Pods 6½ inches long, round, stringless, appealing flavor. Seed white, suitable for dry shell beans.

BLUE RIBBON POLE or **EARLY GENUINE CORNFIELD**—Creaseback type, earlier than Striped Creaseback. 5 feet tall. Pods 4½ inches long, almost round, fleshy and stringless when young. Seed mottled buff and brown.

IDEAL MARKET or **BLACK CREASEBACK**—Very early, about 7 days ahead of Kentucky Wonder, 4 feet tall. Pods 5 to 5½ inches long, round, stringless when young, very good quality. Seed black.

KENTUCKY WONDER or **OLD HOMESTEAD**—The leading pole bean, best known and most widely used. Outstanding in home and market gardens for its fine quality. Adapted for home freezing. Prized for its flavor, both in snap and green shelled stage, 6 feet tall. Pods 7½ to 9 inches long, uneven and slightly twisted, curved, slightly stringy, excellent quality and flavor. Seed grayish brown.

KENTUCKY WONDER, RUST RESISTANT—Rather similar to regular Kentucky Wonder. Resistant to some forms of rust. 5 feet tall. Pods 7 to 8 inches long, round, tender, stringless when young. Seed grayish brown.

KENTUCKY WONDER WAX—Unsurpassed among the wax-podded pole varieties. Pods 7 to 7½ inches long, light golden yellow, thick-flat to oval, quality good, almost stringless. Seed brown.

LONDON HORTICULTURAL or **SPECKLED CRANBERRY** or **WREN'S EGG**—An old variety, used as snap, green or dry shell bean in the home and market garden. 4½ feet tall. Pods 6 to 6½ inches long, wide, splashed with red in green shell stage; stringless, almost fiberless, quality good. Seed buff splashed with red.

McCASLAN—A popular southern garden and shipping variety. 5½ feet tall. Pods 7 to 8 inches, fleshy, slightly stringy, slightly

flattened and twisted, of good quality in younger stages. Seed ivory white.

MISSOURI WONDER or **NOXALL** or **NANCY D**—Excellent sort for green shelled beans; popular for planting with corn. Pods 6 to 7 inches stringy, round, quality fair. Seed mottled pinkish grey.

RED SPECKLED CUTSHORT—An old southern variety for planting with corn. 5 feet tall. Pods 3 to 4 inches long, round, straight, medium fleshy, good quality in young stage. Seed grey splashed with purplish crimson.

ST. LOUIS PERFECTION or **WHITE CORNFIELD IMPROVED**—One of the finest varieties for green snap or dry shell beans in the home and market garden. 6 feet tall. Pods 8 to 9 inches long, creaseback, few strings, very good quality. Seed white.

STRIPED CREASEBACK or **NANCY DAVIS** or **SCOTIA**—Used for snap and shell beans; productive, medium early. 5 feet tall. Pods 6 to 6½ inches, round, fleshy, stringy, good quality. Seed mottled buff with black.

WHITE KENTUCKY WONDER NO. 191—Developed by USDA, a market garden variety with resistance to bean rust. 6 feet tall. Pods 8 to 9 inches, oval, tender and stringless at market stage. Seed white.

BUSH LIMA BEANS

Same cultural directions apply for lima beans as for the green beans.

ALLGREEN—Our new productive green seeded lima with green cotyledons and green seed coat. Plant growth similar to Henderson. Seed small, flat, green cotyledon, green tinted seed coat, excellent flavor, 3 to 4 per pod.

BIXBY—New baby lima bean developed by the Oklahoma Experiment Station. Drought resistant and extremely productive. Seed green at market stage, white when mature; small, medium plump, 3 to 4 per pod.



HENDERSON'S BUSH LIMA

BURPEE'S IMPROVED BUSH—Improvement over the Burpee's Bush Lima. Has thicker beans with more greenish tinge and is slightly earlier. Seed greenish white, large, thick, 4 per pod.

DIXIE BUTTERPEA, WHITE—A relatively new variety particularly adapted for Southern conditions. Seed White, plump, small, almost round, 3 to 4 per pod.

FORDHOOK BUSH—Famed for its distinct large size and appealing flavor. Seed color white tinged with green; large, plump, oval, 3 to 4 per pod.

FORDHOOK 242—The U.S.D.A. developed this potato type lima for productivity under adverse conditions. Excellent quality, widely used for market, canning and freezing. Pods do not retain fresh green color on the market quite as well as regular Fordhook. (A.A.S. B.M. 1945). Seed white tinged with green, large, plump, oval, 3 to 4 per pod.

HENDERSON BUSH—Most widely used of the baby lima beans for home and market gardens; a principal canner and freezer variety because of its productiveness, high quality, hardness, resistance to disease. Seed entirely creamy white, small flat, 3 to 4 per pod. A fine dry shell bean.

JACKSON WONDER or **CALICO**—Popular in the South. Noted for its extreme hardiness and productivity under all conditions. Seed buff field splashed with purplish black. 3 to 4 per pod.

SPECKLED BUTTERPEA—Similar to Dixie Butterpea White except for seed color and even greater hardness and productivity under hot dry conditions. Seed small, thick, almost round, light bright red speckled with dark carmine.

THOROGREEN, IMPROVED EARLY or **GREEN SEEDED HENDERSON**—An improved strain of the original Green Seeded Lima, which has now been selected to a fine uniform stock. Seed has green cotyledons, which give dry seed a green color; 3 to 4 per pod.

WOOD'S PROLIFIC (Yopp's Bush)—Quite similar to Henderson except more vigorous, vine a little larger, pods slightly longer, seeds larger, and somewhat longer in season.

POLE LIMA BEANS

CHRISTMAS LIMA or **LARGE SPECKLED**—Our introduction, now widely used. A long season pole lima producing extremely large beans in the green shell stage of beautifully contrasted Christmas colors. Growth and habit distinct. 9 feet tall. Dry seed creamy field with slightly raised areas of dark vivid red, large-flat, 3 per pod.

FLORIDA BUTTER—Commonly grown in the South. Adapts itself to adverse seasonal conditions very readily. Seed buff with brownish spots and purplish eye-ring, 3 per pod.

KING OF THE GARDEN or **LARGE WHITE**—Best known large seeded pole lima. Good production and climbing ability. Seed white, large, thick, flat, 4 to 5 per pod.

SIEVA or **SMALL WHITE LIMA** or **CAROLINA**—A small-seeded pole bean comparable in many ways to the Henderson Bush Lima. Most popular pole lima in the South. Earliest of the pole limas and continues bearing until frost. Seed white, small, flat, 3 to 4 per pod.

WILLOW LEAF—A novel type because of its willow-like leaves. Otherwise similar to Sieva. Seed white, similar to Sieva.

WOOD'S IMPROVED (Yopp's Prolific)—A Sieva type producing a larger pod and seed. Seed white, tendency to triangular shape.

VEGETABLE SOYBEANS

BANSEI—An early type extensively used by commercial canners and adapted for production of ripe beans in regions of shorter seasons. Also a fine home garden variety for green shelling. Pods yellow with black tinge. Seed large and yellow.

BEETS Table Varieties

Beets are easy to grow and cook. They can be served fresh or pickled, and can be canned or stored over winter in a root cellar. The tops of the young beets make excellent greens. For the first crop, sow the seed very early in the spring, with successive plantings at regular intervals. For fall crops, sow in the early summer. The rows should be about 18 inches apart, the seed planted 1/2 inch deep, and the beets thinned four to six inches apart in the row.



BEETS, DETROIT DARK RED

CROSBY'S EGYPTIAN—An excellent early beet for home and market garden, also shipping. Tops large, upright. Roots dark red, flattened globe shape, smooth. Flesh purplish red, fine textured.

DETROIT DARK RED—Widely used all-purpose variety of superb quality. Important main crop sort, a good keeper. Tops short, uniform, refined. Roots attain near globe shape while still small. Flesh deep blood red.

DETROIT PERFECTED—A fine variety. Tops are tall, of green color tinged with red. Roots attain smooth globe shape early. Flesh deep dark red with very indistinct zoning, tender and of sweet flavor. (AAS S.M. 1934.)

DETROIT SHORT TOP—Highly refined and uniform short top strain of Detroit Dark Red.

EARLY BLOOD TURNIP—Dependable, second early, excellent for home and market garden. Tops fairly large; roots turnip shaped, dark red; flesh tender and of sweet flavor.

EARLY WONDER—An outstanding early market variety, selected from Crosby's Egyptian. Tops medium size; roots flattened globe, uniform, dark red with purplish red flesh, fine quality and flavor.

EXTRA EARLY EGYPTIAN—Extremely early, used for forcing or transplanting for very early market. Also used in home gardens. Top small, erect. Roots flat, dark red; flesh red, good quality when young.

Sugar Beet

IMPROVED WHITE SUGAR or **KLEIN WANZLEBEN**—Used extensively for stock feeding. Exceptionally high in production. White, long-oval root with greenish crown, flesh white.

Mangel

GIANT HALF SUGAR ROSE—Fine for stock feed. Roots long-oval, lower portion whitish and upper or shoulder rose in color. Flesh unusually sweet and white.

MAMMOTH LONG RED—Important for feed because of productiveness. Roots are very large, tapering, light red, about one-half growing above ground. White flesh, tinged with pinkish red.

SWISS CHARD

Leaves are cooked and used much like spinach; the flavor is milder, and Swiss Chard has the advantage of producing new growth throughout the entire summer.

The broad mid-ribs can be used in the same way as asparagus and also celery.

The rows should be 18 inches apart, and the young plants thinned to 8 or 9 inches apart in the rows.

FORDHOOK GIANT—A home and market garden variety with distinct and attractive crumpled dark green leaves. Large, broad, fleshy white stems of fine quality.

LARGE RIBBED, FRENCH DARK GREEN or **WHITE SILVER**—A favorite among gardeners. Leaves are large, almost smooth, appearing medium dark green. Stems thick, broad, white; may be used like asparagus.

LUCULLUS—The most commonly grown chard. Fine for home garden and market. Stems light yellowish green; leaves light green, fleshy, crumpled, attractive.



Broccoli

Broccoli is a cool season crop. Best results will be obtained if the plants are set early in the field. If grown directly from seed in the field, they should be planted to mature in the cool fall weather, or, in the far South, during the winter.

The plants should be set out or thinned to stand 1 1/2 feet apart in rows 2 1/2 feet wide. High soil fertility and good weed and insect control are required for best production.



SWISS CHARD, LUCULLUS

BROCCOLI

CORNELI'S EXTRA EARLY—Exceptionally fine texture for freezing. Early and productive. Large, fairly compact central head followed by abundant side heads. Color gray green. Plant fairly tall and erect.

DE CICCO—An early market and freezing variety. The plant is tall, erect, with fairly loose central head of yellowish green, followed by a good crop of side sprouts of good texture.

EARLY—An outstanding variety, widely used for fresh market, shipping, freezing and home garden. The plant is tall, erect, with a good compact central head and numerous side heads. Produces over long season.

MEDIUM—Later but similar to Early Green Sprouting; produces compact central heads and an abundance of side heads. Suitable for market or quick freezing.

WALTHAM 29—A new variety developed by the University of Mass.; uniform, dark blue-green color, compact center head and side shoots. Noted for its concentration of maturity. A late variety, generally recommended for fall harvesting.

BRUSSELS SPROUTS

Seed should be sown in early summer, the young plants then transplanted to stand 2½ feet apart in each direction. The tender, tasty, sprouts will form on the stalk in the fall. As the sprouts form, remove the lower leaves from the plant to encourage growth of the sprouts.

LONG ISLAND IMPROVED—A fine sort for home and truck gardeners. Most commonly grown as a fall, winter and early spring crop. The plants are dwarf and compact, producing solid, round, cabbage-like balls

1½ inches in diameter which mature in succession from the base of the plant upward and should be harvested accordingly. To extend harvest season beyond hard freezing weather, pull entire plants and stand them together in a shed or yard where they can be covered over with straw for protection.

CABBAGE

ALL HEAD EARLY—Second early, popular shipper, fine for kraut. Plant compact, stem short. Heads 9 inches broad and 7 inches deep, rather flattened, with rounded top, quite firm, of good texture and quality, 5 to 7 pounds.

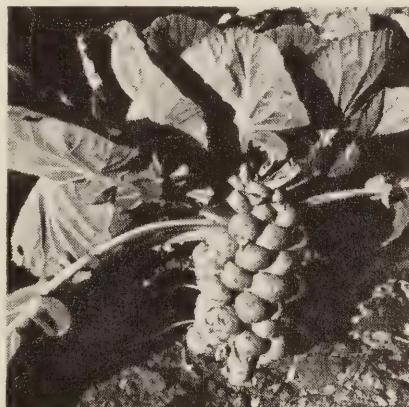
ALL SEASONS or SUCCESIONS—Mid-season, able to withstand hot, dry weather. One of the best for kraut and a fine keeper. Plant large, spreading; medium stem. Heads 9 inches broad and 7 inches deep, rounded at both top and bottom, solid and compact, 8 to 9 pounds.

CHARLESTON WAKEFIELD—Popular old variety, a week later than Early Jersey Wakefield. Plant rather spreading, stem short. Heads 8 inches long and 7 inches across at the base, heart shaped, tender, of good quality, 4 pounds.

COPENHAGEN MARKET—A splendid cabbage, outstanding for shipping and home and market gardens. Plant medium-size, short-stem; heads 6½ to 7 inches in diameter, round, white, crisp, tender, solid, uniform, 4½ to 5 pounds.

KEYSTONE COPENHAGEN MARKET, EXTRA SELECT—An improved and highly refined strain of Copenhagen Market.

CORNELI'S LATE FLAT DUTCH, Y.R.—Preferred for the late crop by market gardeners, shippers, and home gardeners alike. Excellent keeper. Plant large, spreading, stem medium short, bluish-green color. Heads 12 inches broad and 7 inches deep, flattened, firm, white, of good quality, 12 pounds.



BRUSSELS SPROUTS



CABBAGE, KEYSTONE COPENHAGEN MARKET, EXTRA SELECT

DANISH BALL HEAD, SHORT STEM—Fine all-purpose late variety for market, shipping kraut, or storage. Plant medium to large, short stem, leaves medium green with grayish bloom. Heads 7½ inches broad and 6½ inches deep, very hard, crisp, tender, 6 to 7 pounds.

EARLY JERSEY WAKEFIELD—Produces well for early home and market gardeners as well as for shipping. Plant small, compact, short-stemmed. Heads 7 inches long and 5 inches in diameter, conical in shape; interior crisp, tender, fine flavored, 2 to 3 pounds.

EARLY ROUND DUTCH or EARLY FLAT DUTCH—Desirable for market garden and shipping. Plant small, short stemmed, medium dark green. Heads 7 inches in diameter, 6½ inches deep, almost round, solid, good quality, about 5 pounds.

GLOBE Y.R.—A yellow resistant Glory of Enkhuizen. Plant large, spreading, uniform. Heads 9 inches in diameter, deep round, fine quality, about 7 pounds.

GLORY OF ENKHUIZEN—A standard medium early market and kraut variety. Plant large, spreading. Heads 9 inches in diameter, round, solid, very fine quality, about 7 pounds.



CABBAGE, GOLDEN ACRE

Cabbage

Plant the seed early in the spring, transplanting the plants to rows 2 feet apart and 15 to 20 inches apart in the row. Feeding, insect control, and good cultivation pay off in gratifying results with this crop.

The seed should be planted indoors very early in the spring. The young plants, when 2 or 3 inches high, should be transplanted to other flats, or thinned out, to stand 3 inches apart in 5 or 6 inch rows. These flats should be set outside in a sheltered place or in cold frames after danger of heavy frost is past. When the plants are about 6 inches tall, hold the water off for three or four days and set the plants in the field, 15 to 20 inches apart in 2 foot rows. Feeding, insect control, and good cultivation pay off in gratifying results with this crop.

GOLDEN ACRE—An extra early strain of the Copenhagen type. Excellent for home, market, or shipping. Plant rather small, short stem, light green. Heads round, 6 inches in diameter, solid; interior crisp, tender, 3 to 4 pounds.

KEYSTONE GOLDEN ACRE, EXTRA SELECT—A superbly uniform strain of Golden Acre.

JERSEY QUEEN Y.R.—Selected from Jersey Wakefield. About a week later, has slightly smaller head and more bluish color than Jersey. Plant erect, compact. Heads 6½ inches long and 4½ inches in diameter, conical, 2 to 3 pounds.

MARION MARKET, Y.R.—A selection from Copenhagen Market, but larger and later in maturity, and not as uniform. Plant large. Heads 7 inches in diameter, globular, good quality, about 6 pounds.

PERFECTION LATE DRUMHEAD SAVOY—Most popular of the Savoy or crinkled-leaved sorts. Medium late; a fine keeper. Plant medium to large, heavily savoyed, dark green. Heads flattened round, 8 inches in diameter, uniform, solid, fine quality, 6 pounds.

PREMIUM LATE FLAT DUTCH or LATE ST. LOUIS MARKET—Popular late all-purpose variety, hardy and dependable. Plant large, short stem, medium dark green with bluish cast. Heads 12 inches broad, 7 inches deep, flattened, firm, crisp, tender, up to 12 pounds.

RED ROCK—Our strain is medium-sized, solid, dark red, globe shaped. A splendid market and shipping sort. Plant medium large, spreading; heads 6 to 7 inches in diameter, attractive red color, round, solid, about 5 pounds.

KEYSTONE RED ROCK—A fine uniform stock of this popular strain; widely used by the critical market and shipping trade.

RESISTANT DETROIT, Y.R.—Similar to Golden Acre except larger head. Plant medium small. Heads 6 to 6½ inches, round, solid, good quality, 4 to 5 pounds.

STEIN'S FLAT DUTCH—Similar to Premium Late Flat Dutch, but not as large nor late. Plant medium-sized, compact. Heads up to 10 inches broad and 6½ inches deep, flattened, 5 to 6 pounds.

WISCONSIN ALL SEASON, Y.R.—Similar to standard All Season. Plant large, with some variation. Heads 10 inches broad and 8 inches deep, very solid and compact, about 9 pounds.

WISCONSIN BALLHEAD, Y.R.—Improved over Wisconsin Hollander; slightly earlier and has a more uniform, slightly smaller, smooth head. 6 pounds.

WISCONSIN HOLLANDER NO. 8, Y.R.—A popular late variety of the Danish Ballhead type. Plant medium large, hardy, medium

dark green. Heads 7 to 8 inches in diameter, flattened globe shape, firm, 8 to 9 pounds.

CHINESE CABBAGE

CHIHILI—One of the most popular sorts, early and dependable. A distinct, long, straight, pointed head, 18 inches by 3½ inches. Very firm, crisp, tender, and of fine sweet flavor.



CHINESE CABBAGE, CHIHILI

MICHILHI—A uniform strain of the Chihili type, a little longer standing.

WONG BOK—A short, blocky, solid, sure-heading variety, good for market or home use. Heads are about 10 inches long, solid, crisp, tender and white.

CANTALOUPES and MUSKMELONS

BANANA—A long, tapering melon. Popular old fashioned sort. Fruit 16 inches long and 4½ inches in diameter, fair flavor, pink flesh.

HACKENSACK, EXTRA EARLY—A popular extra early green-fleshed muskmelon for home or market gardens. Fruit 5 inches deep and 7 inches in diameter, distinct ribbing, coarse netting, flesh fairly sweet.

HACKENSACK, LARGE—Extra large, used mostly in home gardens for local markets. Fruit 6½ inches long and 9½ inches in diameter, thick green flesh, unusually juicy, sweet, spicy flavor.

HALES BEST, JUMBO STRAIN—Much larger than the original H.B. and more elongated. The large size, earliness, attractive appearance and fine eating quality make it desirable for trucking and roadside markets. Fruit 7½ inches long, 6 inches in diameter, slightly ribbed and well netted. Thick, deep salmon color flesh.

HALES BEST NO. 36—Leading cantaloupe with shippers, truckers and market growers. Highly refined, extremely early and uniform. Fruit 5¾ inches long, 5½ inches in diameter, heavily netted, indistinct sutures. Fine for crate packing. Small seed cavity, and deep salmon color flesh of sweet spicy flavor.

HEARTS OF GOLD or HOODOO—A mid-season cantaloupe popular among gardeners and truckers. Fruit 6 inches long, 5½ inches in diameter, well netted except in the grooves between ribs, greenish rind, flesh thick, firm, spicy, deep orange.

HONEY DEW—Requires a long season, but once matured makes an excellent shipper or storing melon. Fruit 8 inches long and 7 inches in diameter, smooth, hard rind ripening to cream color; flesh light green and exceptionally juicy with a unique flavor and sweetness.

HONEY ROCK or SUGAR ROCK—Early, popular with truckers in Northern areas. Fruit 6 inches long, 5½ inches in diameter, gray-green skin with coarse netting; flesh thick, juicy; deep salmon color; sweet, musky flavor. (AAS G.M. 1933.)



CANTALOUPES, HALE'S BEST NO. 36

IMPERIAL NO. 45 (Powdery Mildew Resistant)—Valuable where this fungus occurs. Can be picked at "full slip" stage and shipped long distances. Flavor fair. Fruit 6½ inches long, 5½ inches in diameter, variable. Heavily netted with distinct slight ribbing. Excellent shipping and holding quality; deep salmon flesh.

OSAGE or MILLER'S CREAM—Splendid muskmelon for home and market garden. Large salmon-fleshed type in the mid-sea-



CANTALOUPES, ROCKY FORD

Cantaloupe

For maximum production a warm, well drained soil is desired. Plant seed in the early summer in hills five feet apart each way. Plant eight to ten seeds per hill about one inch deep; thin the plants later to four or five per hill. A little fertilizer placed in each hill at planting time and mixed lightly with the soil will increase the yield and quality.

Insects are not as much of a problem on cantaloupe as on some other cucurbits, but dusting with Rotenone or other recommended insecticides is advisable.

son class. Fruit 7 inches long, 6½ inches in diameter, dark green skin, slightly netted and ribbed; flesh sweet, thick, juicy.

PRIDE OF WISCONSIN or **QUEEN OF COLORADO**—A fine variety popular for market gardening and shipping. Fruit 6 inches long and 5½ inches in diameter, hard grayish green rind; coarsely netted; flesh thick, juicy, very sweet, deep salmon. (AAS H.M. 1939.)

ROCKY FORD or **NETTED GEM** or **EDEN GEM**—The world-famous cantaloupe that has served as foundation stock for our finest melons. Principally used now for home and market gardens. Fruit 5½ inches long and 5 inches in diameter, indistinct ribs, heavily netted, thick green flesh with a sweet spicy flavor.

TEXAS RESISTANT NO. 1—Developed for resistance to downy mildew and aphids. Dense foliage protects fruits from sunscald. Fruit 5½ inches long 5 inches in diameter; moderately netted; only fair uniformity. Firm salmon flesh; sweet, spicy flavor.

TIP TOP—Unexcelled for home and market garden use. Similar to Irondequoit. Fruit 7½ inches long and 7 inches in diameter, gray-green turning yellowish, slightly netted, distinct ribbing; flesh thick, sweet; deep salmon color.

CARROT

Sow the seed very early in the spring in 12 inch rows and thin the young plants to 2 to 4 inches apart.

Frequent cultivation is desirable.

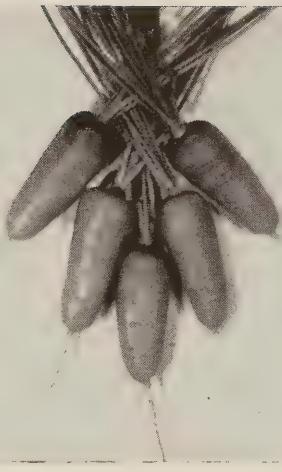
A well-worked soil is required in order for the roots to attain maximum size and smooth shape.

CHANTENAY—Popular early market bunching sort; widely used for winter storage and home gardens. Roots 5 to 5½ inches long, 2½ inches in diameter at the shoulders, slightly tapered, stump-rooted, deep orange color. Its shape adapts it to fairly heavy soils.

CHANTENAY LONG TYPE—Valuable for market and home gardens. Roots 7 to 7½ inches long, 1½ inches in diameter, slightly tapered, stump-rooted, indistinct core, tender, of high quality and flavor.

CHANTENAY RED CORE—A superior strain of Chantenay, more desirable for processors because of its indistinct reddish orange core, finer texture, and superb quality. Similar in size and shape to regular Chantenay.

DANVERS HALF LONG—A leading main crop or storage variety. Roots 6½ to 7 inches long, 2 inches in diameter at the shoulder, tapering to a blunt end. Smooth, uniform, bright orange, tender and crisp.



CARROT, CHANTENAY, RED CORED

IMPERATOR—The principal bunching variety in south-western areas for year around shipping. Also important for market gardens where soil is deep and loose. Roots 8 inches long, slightly rounded shoulders, 1½ to 2 inches in diameter, slightly tapered to tip, smooth, rich orange, crisp, sweet. (AAS S.M. 1933.)

IMPERATOR LONG TYPE—Similar to Imperator, but longer and more important as a shipper. Requires deep soil preparation. Roots 10 inches long.

LONG ORANGE or **ST. VALERY**—A standard variety adapted to loose soil; a tremendous yielder. Used for stock feed and also as a table sort; stores well. Roots 11 to 12 inches long, 2¾ inches in diameter, tapered to a point, deep orange color, lighter core.

OXHEART or **GUERANDE**—A short thick variety, satisfactory for growing on a heavy soil where long varieties do not develop properly. Roots 4 to 5 inches long, attain massive thickness, chunky, blunt-ended, bright orange in color, fair flavor when immature.

ROYAL CHANTENAY—An improved strain of Red Core Chantenay, the roots being about two inches longer and retaining the blunt-ended, blocky shape.

TOUCHON or **IMPROVED NANTES** or **CORNELI'S CORELESS** or **TAMPA MARKET**—A highly refined carrot for canning and freezing, as well as for home and market gardeners, which is replacing the older Nantes strains. Roots 6½ to 7 inches long, 1½

inches thick at frequently exposed shoulder, nearly cylindrical, stump-rooted; smooth, fine grained, sweet, tender, bright orange.

CAULIFLOWER

EARLY SNOWBALL or **CATSKILL** or **DWARF ERFURT**—Splendid early market type, unsurpassed for use as a forcing variety, uniform. Plant dwarf, compact, upright, short-leaved. Heads 6 to 7 inches across, 1¾ pounds, compact, solid, uniform, snowy white.

SNOWDRIFT or **WHITE MOUNTAIN**—An early shipping and market type acclaimed for its general superiority over the old Snowball types. Has several colloquial names. Plant slightly larger than Snowball, self-protecting, although tying or breaking of leaves still necessary for bleaching. Heads slightly larger than Snowball, remarkably free of riciness, snow white, solid, compact.

SUPER SNOWBALL—An early main-crop variety of uniform production. One of the most profitable sorts. Plant dwarf, compact; heads 7½ inches across, solid, compact, uniform, snowy white, of superb quality.

CELERIAC

ERFURT—A fine vegetable for flavoring salads, soups, stews, etc. A large, turnip-like root formed under the ground comprises the edible portion of the plant. The hollow dark green stems above ground may be used in cooking for flavoring. The roots may be stored into the winter months.

CELERY

Sow seed indoors very early in the spring. When plants are about 2 inches high, withhold water until they show signs of wilting; then transplant to open ground in 3 foot rows, 6 inches apart in the row.

As the plants grow, tie the leaves together to keep dirt out of the lower stems. The practice of blanching celery has just about disappeared, since the green stalk types have met with favor.

Keeping the indoor temperature at 65 to 70° while the plants are young will help prevent premature formation of seed stalks.

GIANT PASCAL—Finest quality, delicious flavor. Essentially a winter variety. Plant 2 feet tall, large, dark green foliage, stocky, forms a large heart which may be blanched to a beautiful creamy white by trenching. Sweet, nutty flavor.

GOLDEN SELF BLANCHING (dwarf)—Still the most popular variety for home and market gardens. Ours is the true dwarf strain. Plant medium height, erect and compact, blanches easily to a beautiful creamy white stalk and golden yellow foliage, fine nutty flavor.

Cauliflower

This crop is one of the most difficult to grow successfully. Cool growing weather, high humidity and high soil fertility are required for best production. Several applications of commercial fertilizer during the season will pay dividends. Plants should be kept growing rapidly; stunting may result in very small heads, riciness, or leaflets in the curd.

Plant the seed early in boxes or hot beds and transplant when about 5 inches high, and the danger of frost is more or less past, to rows 2½ feet apart, standing 2 feet apart in the row.

After the heads begin to form, the leaves should be tied loosely over the head to produce attractively blanched heads.

For fall and winter use, sow seed directly in the ground in early summer.

SNOWDRIFT



CELERY, SUMMER PASCAL

SUMMER PASCAL (Waltham Strain)—This is an early Pascal celery of excellent eating quality, maturing after the yellow and before other green varieties. Plant medium tall, sturdy, vigorous and compact; stalks thick, crisp, stringless.

SUPREME GOLDEN—A fine shipping variety, taller and earlier than Golden Self Blanching. Plant medium tall, erect and compact, with exceptionally full heart. Fine flavor.

UTAH PASCAL (Utah No. 15 or No. 99)—Rather late but 10 days earlier than Giant Pascal. A green type, excellent for fall use. Plant medium large, sturdy, erect and compact; blanches nicely but generally used green. Crisp stalks of excellent quality and flavor.

COLLARDS

This is a non-heading member of the cabbage family, and is a popular "green" in the South, where it is usually planted in the summer and used throughout the fall and winter. The seed can be sowed from late spring until early summer, and the plants thinned to stand about 2 feet apart in each direction.

CABBAGE—Compact plant, sometimes displays tendency to form loose head, but like other collards is useful for the leaves. Harvested as needed for "greens" during the winter in the South.

GEORGIA or SOUTHERN or CREOLE—A most hardy sort which forms a rosette of tender leaves at the top of a plant 2 to 3 feet tall. Splendid for greens; generally adapted to conditions where cabbage will not grow.

LOUISIANA SWEET—Improved over the Old Georgia Collard as it has larger leaf area and less stem along with an appealing color and thick, tender leaves.

CORN SALAD

LARGE LEAVED—Sometimes called Lamb's lettuce. An extremely hardy plant that forms rosettes of tender leaves which are used as a substitute for lettuce and mixing with salads. Leaves are large, rounded, and thick, of a gray-green color.

SWEET CORN Hybrid Varieties

BIG MO (Y)—Ears very large of good quality, borne on tall vigorous dark green stalks. Withstands adverse growing conditions. (A.S.S. H.M. 1951.)

CARMELCROSS (Y)—A well known second-early hybrid which fits in between Cornelius' Gold Rush and Golden Cross hybrids to give a continuous supply. Suitable for canning in districts of shorter seasons. Ears medium size, borne on sturdy stalks.

CORNELI'S GOLD RUSH (T.M. Reg. U.S. Pat. Off.) (Y)—The one best first-early yellow hybrid for the early market. Ears fully as large as those of Golden Cross and ten days to two weeks earlier. The combination of earliness and beautiful ears is extremely useful to gardeners and shippers. A favorite with shippers on the muck lands of Florida; with canners in Canada and Northern states; and with home and market gardeners everywhere. Ears 8 1/2 inches long, 12 to 14 rowed; tight husk, attractive dark green flags.

COUNTRY GENTLEMAN ILLINOIS 13 (W)—Exceptional for its holding ability in the field and high quality. Ears 7 1/2 inches long, slightly tapered, with irregular rowing.

FLAGSHIP IMPROVED (Y)—Sweet tender kernels and attractive ears, combined with vigor and productivity. Ears 8 1/2 inches long, 12 to 16 rows. (A.S.S. H.M. 1949.)

GOLDEN CROSS (Y)—Still the standard for quality by which all other hybrids are judged. Our strain is extremely uniform, with excellent flavor, tenderness and quality. Ears 8 inches long, 12 to 14 rowed.

ILLINOIS GOLDEN NO. 10 (Y)—A drought resistant hybrid of great vigor, in season with Golden Cross Bantam. Ears 8 inches long, 12 to 16 rowed, very uniform.

IOANA (Y)—A hardy main-crop variety with uniform attractive ears; resistant to Stewart's disease. Ears 8 inches long, 12 to 14 rows. (A.S.S. B. M. 1940.)

IOCHIEF (Y)—Very productive hybrid. Drought resistant, vigorous, practically suckerless. Ears 8 1/2 inches long, 14 to 18 rows, large and attractive. (A.S.S. Gold Medal 1951.)

KEYSTONE EVERGREEN HYBRID (W)—Stowell's Evergreen type, outstanding for its productivity, drought resistance and vigorous growth. Ears 8 1/2 inches long, 14 to 18 rowed, well-filled to tip.



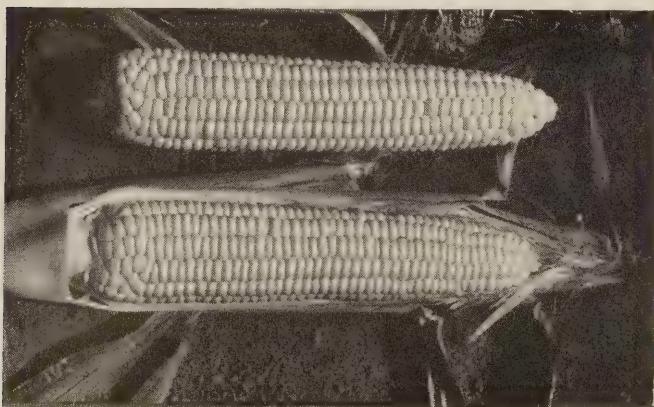
CORN, PROSPERITY

KVF 50-15 (Y)—Splendid new main-crop hybrid distinctive for its attractive slender ears of bright yellow color, quality, and very high production. One of the few varieties adapted to whole ear canning and freezing. Ears 8 1/2 inches long, by 1 3/4 inches in diameter, 12 to 14 rowed, very uniform in size, shape and maturity; white interior silks.

MARCROSS (Y)—Early; used in the more northern areas. Ears 7 inches long, plump, 10 to 14 rows with broad kernels.

PROSPERITY (Y)—An outstanding new hybrid for canning, freezing, shipping, and fresh use. Widely adapted. Ears are most attractive, 8 1/2 inches long, 16 rowed, with deep, narrow, clear yellow kernels, well covered by bright green husks with nice looking flags.

SILVERLINER or WHITE GOLDEN CROSS (W)—A white hybrid with quality comparable to Golden Cross. Good husk coverage affords protection to the tip. Ears 8 1/2 inches long, 14 to 18 rows, nearly cylindrical, uniform in size, shape and maturity.



CORN, CORNELI'S GOLD RUSH

Sweet Corn

Sweet corn seed of today is the result of the most highly developed and controlled breeding process in the garden seed industry. We refer specifically to the hybrids now available which are made to fit particular conditions and requirements, whether it be for canning, freezing, shipping, local marketing, or home use.

The vigor, disease resistance, uniformity of maturity, resistance to lodging, quality and productivity of hybrid as compared to open-pollinated



HYBRID SWEET CORN SEED FIELD

STOWELLS EVERGREEN HYBRID (W)—A hybrid to replace the popular open-pollinated Stowells Evergreen. Superior for its uniformity, vigor, productivity, and resistance to drought. Ears 8½ inches long, 14 to 18 rows of deep kernels; tight heavy husks.

SWEETANGOLD (Formerly KVF 47-10) (Y)—A vigorous new large eared, main-crop hybrid desirable for market and shipping, and for canning, especially in the Tri-States. Widely adapted, does especially well in the South; resistant to earworm, leaf blights and adverse growing conditions. Ears 9 inches long, 14 to 18 rowed, slightly tapered, well filled, uniform in size, shape and maturity.

TEMPO (Y)—A new main-season shipping and market hybrid of our own development. Very high yielding, owing to a high percentage of plants with two ears. Ears 8½ inches long, 14-16 rows of narrow, medium-deep, light golden kernels.

Open-Pollinated Varieties

BLACK MEXICAN (W)—An old variety, known for its sweet and delicious flavor. Remains tender for a long period. Kernels turn bluish black after edible stage is past.

COUNTRY GENTLEMAN or SHOE-PEG (W)—An old well known variety. Not as uniform as Country Gentleman hybrids but of comparable quality; matures over longer period of time. Ears 7½ to 8 inches long, very crowded, irregular kernels.

GOLDEN BANTAM (8-Row) or BARDEN'S WONDER BANTAM (Y)—An old standby. Formerly widely used. Invaluable as breeding stock in the development of many hybrids of today. Ears 7 to 8 inches long, 8 rowed, well shaped.

STOWELL'S EVERGREEN (W)—A popular standard main-crop sweet corn for home and market garden. Ears 8½ inches long, 16 to 18 rowed, plump kernels.

VANGUARD or HOWLING MOB (W)—A productive, large-eared, second early variety, suitable for home and truck gardeners; very good quality. Ears 8 to 8½ inches long, 10 to 14 rowed, somewhat tapering.

White Table Varieties

EARLY ADAMS (W)—A hardy table variety that can stand more cold, damp weather than regular sweet corn. Ears 7 to 8 inches long, 12 to 14 rowed.

EXTRA EARLY ADAMS (W)—Another very hardy table variety; extremely early; can be planted earlier than sweet corn. Ears 5½ to 6 inches long, 12 rowed.

TRUCKERS FAVORITE (W)—Well-known variety used as roasting ears for local trade and shipping. Produces good crop of feed corn if roasting ear market unfavorable. Ears 8 to 9 inches long, 12 to 16 rowed.

TRUCKERS HYBRID (W)—This early white double-cross hybrid merits growing for roasting ears, to replace Truckers Favorite. Ears 9 inches long, attractive and uniform.

POPCORN SEED

IOPOP 5 (W)—An improved Japanese hulless type, with better yield, popping expansion and quality. Similar to Minhybrid 250.

JAPANESE HULLESS (W)—A white, small and slender pointed-kernel type, with short stubby ears. Unusually tender, sweet and pure white when popped. Stalk slender and about 5 feet tall.

MINHYBRID 250 (W) (Hybrid)—An improvement over Japanese Hulless for yield and popping expansion. It also matures earlier, so is adapted to Northern areas. Ears 3 to 4 inches long, plump and blunt.

PURDUE 32 or K4 (Y) (Hybrid)—Extremely heavy yielding; kernels expand to exceptionally large size. The popped corn is desirable for its tender texture and rich flavor. Stalks approximately 6 feet tall; mostly 2 eared. Ears 6 to 7 inches long, slightly tapered and well filled.

SOUTH AMERICAN or T.N.T. or DYNAMITE (Y)—Popular variety in the longer growing season areas. Large, dark yellow, smooth kernels on slender 7 to 7½ inch ears. Particularly desirable for its high yield, and popped quality.

CUCUMBER

***A&C or COLORADO**—An extra long slicer and a good shipper. Adapted to rich soils. Fruit is 9 to 10 inches long; 2½ inches in diameter, cylindrical, slightly tapered toward ends.

***ARLINGTON WHITE SPINE or EARLY FORTUNE**—An old, popular sort for home garden use. Quite early and prolific. Fruit is 8 inches long and 2½ inches in diameter, blunt ended.

BOSTON PICKLING—Sometimes called Green Prolific. Noted for earliness and productivity. Fruit is 6 inches long, 2½ inches in diameter, smooth, uniform, with only a slight taper, medium dark green.

CHICAGO PICKLING—Most slender of the pickling varieties. May be used for slicing. Fruit is 6½ inches long and 2¼ inches in diameter, square-ended, uniform; medium green color.

***CUBIT**—Noteworthy for its dark green color and long cylindrical shape, a good market and shipping variety. Fruit is 9½ inches long, 2¼ inches in diameter, blunt ends, holds color well on market.

EARLIEST OF ALL—Used by some Southern producers for pickling. Fruit is 7½ inches long and 2½ inches in diameter, smooth, rounded at both ends, medium dark green.

EARLY CLUSTER—Popular as a pickling variety or an extremely early slicer, often sets fruit in clusters. Fruit is 5½ inches long and 2½ inches diameter, skin smooth, medium green.

***EVERGREEN WHITE SPINE or CLARK SPECIAL or DAVIS PERFECT**—A medium late variety, still popular in home and market gardens. Fruit is 10 inches long and 2½ inches in diameter, medium green.

GERKIN or BURR (West India Gherkin)—A distinct species, very prolific, small, generally used for pickles. Fruit is 2 inches long and 1 inch in diameter, covered with prickly spines; medium green.

Sweet Corn, Continued

nated varieties are truly outstanding and justify the present wide-spread use and popularity of hybrid sweet corn.

Sweet corn is a warm season crop and requires adequate moisture during the growing season. Extreme hot weather at pollinating time will cause the ears to be poorly filled.

Shallow cultivation should be practiced since many of the roots of this plant are near the ground surface. Spraying or dusting for earworm control will insure more edible corn. Seed treatment is

added insurance for successful stands. Adequate fertilizer should be applied at planting time to carry the plants through the season (take care to see that the seed does not come into actual contact with the fertilizer). A side dressing at pollinating time is usually beneficial as well.

Plant the seed in rows 3 to 4 feet apart, either 4 or 5 kernels in hills 3 feet apart or single kernels drilled one foot apart. Plant seed to a depth of one inch. The corn will be ready to eat 18 to 20 days after silks appear, or later in cool seasons.



COMPARISON OF PICKLING CUCUMBERS

JAPANESE CLIMBING—A strong vined variety primarily used for slicing, but also for dill pickles. Fruit is $7\frac{1}{2}$ inches long, 3 inches in diameter, with an almost smooth surface; tapered on the stem end, blunt on the blossom end.

LONG GREEN IMPROVED or LONDON LONG GREEN—An old favorite with home gardeners for slicing and for ripe (yellow) pickles. Fruit is 10 inches long and $2\frac{1}{2}$ inches in diameter, slender, slightly tapered, medium green, fine quality.

***MARKETER (EARLY GREEN MARKET)**—Dark green color and attractively shaped fruits, together with productiveness have made this the leading market and shipping variety in most areas. A fine slicing variety. Fruit is 8 inches long, $2\frac{1}{4}$ inches in diameter, slightly tapering toward ends, very dark green, holds color well on market.

***MODEL**—A recent introduction, similar to National Pickling; but white spined and darker green. Fruit is 6 inches long, $2\frac{1}{2}$ inches in diameter. Attractive; good pickling quality.

NATIONAL PICKLING—The principal commercial pickling variety. Used for both dill and small pickles. Careful maintenance of the original stock makes our strain one of the best. Fruit is 6 inches long and $2\frac{1}{2}$ inches in diameter, prolific, medium dark green, well shaped, blunt ended, fine quality.



OHIO MR17 (MOSAIC RESISTANT)—New pickling variety that yields with National Pickling, out-yielding it by far when mosaic is present. Vigorous healthy vine produces fruit right up until frost. Fruit is $6\frac{1}{4}$ inches long, $2\frac{1}{2}$ inches in diameter, resembles National Pickling closely, but is darker green and somewhat longer. Flesh is thick and solid.

***PALMETTO**—A downy mildew resistant variety, developed for Southern growing conditions. Fruit is 8 inches long, $2\frac{1}{2}$ inches in diameter, thick flesh and small seed area; dark green, slightly pointed ends.

***SANTEE**—A sister line of Palmetto, introduced for its earliness, tolerance to downy mildew, and fine fruit characteristics. Recommended for early spring crop. Fruit is 9 inches long, 2 inches in diameter, cylindrical ends slightly pointed.

***STAYS GREEN or BLACK DIAMOND**—This well known variety used for commercial pickle production in the South. Fruit is 7 inches long, $2\frac{1}{2}$ inches in diameter, blunt ends, uniform; dark green holds well.

***STRAIGHT EIGHT**—A fine shipper and also splendid as a slicer for the home garden. Fruit is 8 inches long; 2 inches in diameter, straight and cylindrical with blunt ends; deep rich green.

WHITE WONDER—A distinct variety with a novel pure white color, and good edible quality. Fruit is 7 inches long, $2\frac{1}{2}$ inches in diameter, blocksy shape with rounded ends, pure white at all stages.

(In the above descriptions, the asterisks indicate white spined varieties; the remainder are black.)

EGGPLANT

Eggplant grows best in warm weather and in rich, light soil. The seed should be sown indoors or in hot beds, thinned out when about 3 inches high, and then transplanted into the field when the weather is fully settled and the ground warm. The plants should stand $2\frac{1}{2}$ feet apart each way.

BLACK BEAUTY—The most universally used home and market garden variety, holds its color well after being picked. Plant is 24 to 30 inches tall, fruit is deep purplish black, smooth, large blunt egg-shape.

EARLY LONG PURPLE—An early type with weaker plant growth and long shaped fruits. Plant is 20 to 24 inches tall, fruit is dark purple, $2\frac{1}{2}$ inches in diameter, 7 inches long, slender, smooth.

FLORIDA HIGH BUSH—Suggest Fort Myers Market.

FLORIDA MARKET—A new Fort Myers type with resistance to Phomopsis blight. Plant is 30 to 36 inches tall, fruit long oval shape, blackish-purple in color, fairly uniform.

FORT MYERS MARKET—Well known in the South for its ability to withstand drought and its fine appearance and market acceptance, an improvement over Florida High



**EGGPLANT,
FORT MYERS MARKET**

Bush. Plant is 30 to 36 inches tall; fruit is 6 inches long, oval shape, slightly thicker near blossom end, blackish purple in color, uniform.

ENDIVE

A delicious salad green having a distinctly appealing, tart flavor. Easily grown and can be had throughout the growing season by repeated plantings. Does best when it matures in cool weather. Sow the seed in rows about 15 inches apart; plants should be thinned to stand 10 to 12 inches apart. The center of the plant can be blanched by tying the outer leaves together as the plant approaches maturity.

FULL HEART BATAVIAN or ESCAROLE or FLORIDA DEEP HEART—A fine endive, improved over the old Batavian Broadleaved. Leaves medium dark with crumpled outer surfaces; plants 12 to 16 inches across, dense and fairly upright so that the heart becomes well bleached. Widely used.

GREEN CURLED RUFFEC or GREEN CURLED GREEN RIBBED—Dark green, finely but deeply cut and fringed leaves. Plants 12 to 15 inches across, easily tied for blanching. Midribs light green.

HERBS

Herbs add much to the garden, both in attractiveness and usefulness. The seed can be grown early in the spring in rows about 16 inches apart and covered lightly with fine soil well pressed down.

Cucumber

Like other vine crops, cucumbers thrive in fairly warm weather and are usually killed by frost. Unlike most other vine crops, they need abundant moisture. Keep the plants well picked, because if the fruit are allowed to mature, the plants cease to set on more fruit.

Sow the seed in hills 4 feet apart each way, planting 8 to 10 seeds per hill to a depth of 1 inch.

Fertilizer or well rotted manure mixed with the soil in the hill will prove beneficial.

Thin each hill to about 3 of the most vigorous plants. Cucumbers are difficult to transplant, but can be handled this way if the seed is sown in small containers and the entire lump of soil carefully transplanted.

When the plants are established, thin them to about 12 inches apart in the row. The young plants are delicate and should be kept well cultivated.



FIELD OF ESCAROLE

KALE or BORECOLE

Sown in the South to mature in the fall and winter and early spring. Father north sown in late spring for early fall use. Frost is said to improve the flavor and quality of this green. Sow seed in rows 2 feet apart and thin plants to stand 2 feet apart in the row. For an early start, grow plants indoors as with cabbage and transplant to the field.

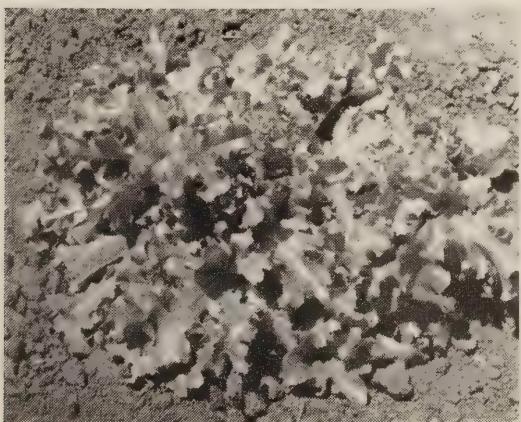
DWARF BLUE SCOTCH—Has a distinct bluish green cast. Stands considerable cold weather without turning yellow. Plants are spreading and uniform; leaves are extremely curly and handsomely plumed.

DWARF GREEN SCOTCH—Finely curled and plumed leaves radiate from the crown without visible stem or stalk. An attractive bright medium green "moss curled" market type.

SIBERIAN or DWARF GERMAN GREENS—This variety is extremely vigorous and spreading in growth; its dark, rich, slightly bluish green, frilled-edge leaves are attractive and of fine quality.

KOHLRABI

The edible portion of Kohlrabi is the swollen stem which develops entirely above ground and is used the same way as turnip roots, but the flavor and texture of Kohlrabi are more delicate. Since rapid growth during the cool season is necessary for a tender product, Kohlrabi does best if planted in the spring or fall. Sow seed in light rich soil, in 18 inch rows. Thin the young plants to 6 inches apart in the row.



LETTUCE, SALAD BOWL

EARLY PURPLE VIENNA—An early variety recognized for its excellent quality and uniformity. Plant is small, with purple leaves and stems, adapted for forcing. Bulbs are edible when about 2 inches in diameter; globe shaped, purple in color; flesh, white, tender, crisp.

EARLY WHITE VIENNA—The more popular variety. Excellent for forcing or home and market gardening. Bulbs—edible when about 2 inches in diameter; globe shaped, light whitish green color; flesh, white, fine textured, crisp and tender.



KOHLRABI,
EARLY WHITE VIENNA

LEEK

Leeks are mild in flavor and are used as flavoring in soups, stews and salads. The long blanched leaf bases resemble thick green onions. Sow the seed about $\frac{1}{2}$ inch deep in 2 foot rows, early in the spring.

LARGE LONDON FLAG or AMERICAN FLAG or GIANT MUSSELBURG—An old standard variety with stems that become very long, thick, and white. Early; popular with market gardeners wherever leek is grown,

LETTUCE

BIBB—A very early variety of fine quality used for forcing and home garden. Forms a small rosette for serving individual salads. Plant—small central rosette, firm, crisp; inside golden yellow; outer leaves smooth, dark green.

BIG BOSTON or TROCADERO—An old, standard variety of the "butterhead" type. Good for hotbed and cold frame forcing, or outdoors. One of the surest heading of this type. Heads are medium sized, globular, firm, compact, crisp, tender, with buttery, yellow heart; outer leaves smooth, glossy, medium light green, with reddish tinge on margins.

BLACK-SEEDED SIMPSON—Early; grows rapidly and dependably whether under glass or in the open; fairly tolerant of hot weather. Plant is large, upright, compact; leaves crinkled and curled, dainty light green color; excellent flavor and quality.

EARLY CURLED SIMPSON—Vigorous, dependable grower; compact, large crinkled, leaves are decidedly crisp and tender, excellent quality and flavor.

GRAND RAPIDS—Outstanding for greenhouse forcing, very early for outside growing. Fairly tolerant of hot weather. Plant is compact, rapid grower; leaves curled, crisp tender, attractive light green; particularly sweet.

GREAT LAKES—Produces solid heads without tipburn even under adverse conditions. Heads are large, crisp, tender and of good shipping quality; outer leaves dark green and well folded.

HANSON—A standard, medium late summer heading variety. Heads are large, light green, curled, tender, crisp, compact, with a delightful flavor.

ICEBERG—This true Iceberg is greatly in demand for use in home gardens. Heads are medium large, attractive, compact, light green; interior white, crisp, tender, and sweet.

IMPERIAL NO. 44—Produces excellent but fairly small heads. Matures best under fall growing conditions. Heads are solid and attractive with outer leaves tightly folded and compact.

IMPERIAL NO. 847—Resistant to Brown Blight types, heads are medium large, attractive and oval in form; solid, and of very fine quality.

MAY KING—An early butterhead lettuce, for forcing under glass. A fine outdoor variety for early spring planting. Heads are small, compact; light green outer leaves with inner leaves creamy yellow and delicately flavored.

NEW YORK or WONDERFUL—Produces fine, large, hard, handsome heads which will carry for long distances. Our strain is unsurpassed. Heads are round, attractive, dark green, tightly folded; interior white, crisp, tender.

OAK LEAVED—A distinct type with smooth, deeply lobed leaves. An old favorite in home gardens. Plants are medium large size, spreading, medium green; leaves are thick, succulent, and tender.

PRIZE HEAD—This old home garden favorite is considered one of the best non-heading varieties. Too tender for shipping. Plant is medium size, curly, loose leaf; inner leaves thin, crisp, bright medium green, fine flavor; outer leaves bronzed.

Lettuce

Lettuce has become one of the most widely used vegetables, owing to its wide adaptability and the development of new or improved varieties.

Sow the seed in rows 12 inches apart, as early in the spring as possible and use the young thinned out plants for early lettuce, leaving plants about 8 inches apart in the row for later use. Lettuce can be sowed several weeks in succession for extended harvest. Moderately moist, fertile soil is best for growing tender, crisp lettuce. In warmer sections, leaf lettuce is more successful than head lettuce.



LETTUCE FIELD IN FULL BLOOM

ROMAINE, or DARK COS—Withstands considerable heat and unfavorable weather. A valuable green salad variety and good shipper. Heads are large, erect; well folded outer leaves are dark green, slightly crumpled, with lighter interior; crisp, endive-like flavor.

ST. LOUIS MARKET (Hubbard's Market)—A butterhead type for garden, local market of forcing. Heads are dark green, crumpled, with straight-edged leaves; compact, medium sized, globular, buttery flavored head.

SALAD BOWL—A new variety, notable for its attractive, tender leaves produced even under warm, dry conditions. Fine for home gardens. Well adapted to prepackaging. Good source of vitamin A and C. Plant large, round, compact, with long, deeply-lobed, medium green leaves.

WHITE BOSTON or UNRIVALLED or CABBAGE or BUTTER—Similar to Big Boston, but lighter colored and without reddish-brown tinge on leaves. Particularly fine for home or local marketing. Heads are medium size, butterhead, compact, crisp, creamy yellow interior; outer leaves light green, smooth.

MUSTARD

Commonly used for greens throughout the South, and becoming more and more popular as people learn of its delicious pungent flavor. Mustard is usually grown in spring and fall gardens. Sow the seed very early in the spring in 18 inch rows, and thin the young plants to about 6 inches apart. Successive sowings can be made.

CHINESE BROADLEAF or ELEPHANT'S EAR—Hardy and vigorous, producing large, broad, serrate, dark green leaves with a rounded mid-rib; tender and excellent for greens. Does not shoot seed stalks quickly.

MUSTARD, CHINESE BROADLEAF



the same spacing as corn. Harvesting at the young, tender stage is quite important.

CLEMSON SPINELESS—A fine canning, commercial and garden variety of the Perkins type, with spineless pods. Plant is 4 to 4½ feet tall; very prolific. Pods—develop up to 9 inches long by 1½ inches in diameter; rich green and of good quality.

EMERALD (Green Velvet)—An attractive new dark green variety of the "velvet" type especially desirable for canning or freezing. Plant—2½ to 3 feet tall, fairly sparse foliage. Pods—8 to 9 inches long; slender, round, spineless, smooth, of a dark green color.

PERKINS DWARF GREEN LONG POD—This variety combines dwarf growing habit with long pod characteristic. Plant—2½ to 3 feet. Pods—7 to 8 inches long, dark green, slender, good quality.

WHITE VELVET—Suggest Emerald.

ONIONS

BERMUDA, YELLOW—An old standby, mild and sweet, used for early market. Bulbs—medium size, flat, with white, juicy, mild-flavored flesh and light tan skin.

SOUTHPORT YELLOW GLOBE (Brigham strain)—This improved strain is known for its fine shipping and keeping qualities. Bulbs—medium sized, globe; flesh creamy white, solid, fine grained; skin, thick, dark yellow.

CRYSTAL WAX—A very early, mild, white onion of the Bermuda type. Popular in the South for early shipping to Northern markets. Not suitable for long storage. Bulbs—medium sized, flat shaped; flesh, white, coarse textured, juicy, sweet; skin, waxy, pure white in color.

DANVER'S YELLOW GLOBE—A splendid yellow globe type. Matures early. Valuable as a storage onion. Bulbs—medium sized, round, uniform, small neck; flesh, crisp, fine textured, fairly mild; skin, thick, yellow.

EARLY YELLOW GLOBE—An excellent early onion combining earliness, color and type with good keeping qualities. Bulbs—medium large, globular to slightly elongated with a deep golden color; solid, crisp, fine textured, light creamy flesh.

EBENEZER or JAPANESE—Good for sets because of over-winter keeping qualities, and for dehydrating because of excellent strong flavor. Bulbs—thick-flat shape, small necks; flesh, very firm, creamy white, fine textured; skin, deep yellow.

KEYSTONE YELLOW SWEET SPANISH No. 6—Unquestionably the finest sweet Spanish. Produces tremendous tonnage of U.S. No. 1 per acre and stores over entire winter with remarkably low shrinkage. Bulbs—large, perfect globe, small neck, with heavy deep yellowish-brown skin. Flesh, white, mild pleasing flavor.

RED CREOLE—A red deep-flat type, resistant to thrips, late. Bulbs—large, oblate, reddish skin; flesh solid, fine grained, pinkish color, of a distinctly agreeable flavor.

MUSTARD, FLORIDA BROADLEAF



RED WETHERSFIELD—An excellent red skinned variety for the production of sets or large mature bulbs for long storage. Bulbs—large, flattened, uniform, small neck; flesh, solid, white tinged with pink; strong pleasing flavor.

SOUTHPORT WHITE GLOBE—A beautiful, high quality, large white onion. A good keeper for a reasonable length of time. Bulbs—medium large, perfect globe; flesh, waxy white, fine grained, mild; skin, thin, attractive pure white.

WHITE LISBON BUNCHING—A white non-bulbing variety generally used for early bunching onions. Swells only slightly at base.

WHITE PORTUGAL or SILVERSKIN—The all-purpose white onion. Excellent for pickles, boiling, or for green bunching. Early, hardy, and reliable, main white set producer. Bulbs—medium sized and thick-flat; flesh, firm, fine grained, mild; skin silvery white.

WHITE SWEET SPANISH (Jumbo)—Fulfills demand for a white Sweet Spanish onion; stores over short period; yields very well. Bulbs are large, very uniform globe, attractive pure white; flesh, fine grained, of fine quality and mild flavor.

YELLOW SWEET SPANISH (Utah)—An improvement over the old Riverside strain, now a popular commercial Sweet Spanish. A fairly good keeper. Bulbs—large globe with dark yellow skin, small neck; flesh, white, fine grained and of mild sweet flavor.

PARSLEY

Parsley has been used as a garnish since the days of the early Greeks. The leaves are also used for flavoring in soups and salads.

Sow the seed in 12 inch rows very early in the spring. When the plants are well established thin them to stand about 6 inches apart. Germination of the seed will be hastened by soaking the seed in warm water before planting.

For winter use the leaves may be dried, or plants may be set in pots and kept on the kitchen window.

HAMBURG (Edible Root)—This parsley forms a thick parsnip-like root which is used for flavoring in soups, etc., and may be stored for winter use. Leaves are flat and deeply cut.

MOSS CURLED or DOUBLE CURLED or TRIPLE CURLED—Unsurpassed for decorative garnishing purposes, this variety produces a compact growth of very curled dark green leaves.

PLAIN—Desirable for its aromatic and flavoring qualities in soups, etc. This plant is a heavy yielder of smooth, dark green, deeply cut leaves.

PARNIP

Parsnip is another plant that dates back to ancient times.

Sow the seed during the early spring in 12 inch

rows and thin the plants to 6 inches. A moist, rich, well prepared soil is desirable. Harvest the roots in the late fall or winter. The roots are not injured by freezing, and actually undergo an improvement in quality after a few frosts.

HOLLOW CROWN or IDEAL or GUERNSEY or MODEL—One of the best and most popular varieties. Hardy, a vigorous grower, and highly dependable. Superb sugary flavor, good quality. Roots—about 12 inches long, 3 inches in diameter at the shoulder, tapered to a point, smooth, hollow crowned, white; flesh fine textured, tender.

PEAS

**Smooth Seeded Varieties.*

***GARDEN ALASKA, W. R.**—Widely grown because of its heavy production and resistance to Fusarium wilt. Familiar to everyone in the home garden or as canned Early June Peas. Vine—28 inches tall, slender, light green; pods—2 3/4 inches long, blunt, light green, straight, 5 to 7 small round peas.

ALDERMAN or DARK TELEPHONE or TELEPHONE—Heavy production, excellent quality, attractive pods, and wilt resistance make this an excellent variety for home, market, quick freezing and shipping. Vine—4 1/2 to 5 feet tall, coarse, hardy; pods—4 1/2 to 5 1/2 inches long, single, broad, plump, pointed, straight, 8 to 10 large, dark green tender peas.

AMEER or CLAUDIT or MAMMOTH POD ALASKA—A fairly large podded Alaska type with earliness and cold tolerance. Vine—30 to 36 inches; pods—3 to 3 1/4 inches long, blunt, somewhat curved, 7 to 8 round light green peas.

AMERICAN WONDER (NOTTS EXCELSIOR)—Early sort with fine flavor, popular for home garden. Vine—15 inches tall; pods—3 1/2 inches long, blunt, straight, 6 to 7 tender peas.

BLISS EVERBEARING—Dependable, hardy, long-bearing; grown principally in home and market gardens. Wilt resistant. Vine—2 1/2 feet tall; pods—3 inches long, paired, almost blunt, straight, 5 to 6 large peas.

CREOLE—Particularly valuable for home garden planting in the South. Also recommended as green cover crop, shows resistance to mildew. Vine—4 1/2 to 5 feet tall, pods are 2 3/4 to 3 inches long.

DWARF ALDERMAN or DWARF TELEPHONE—A very fine large podded pea for gardeners and shippers. Resistant to Fusarium wilt. Vine—28 inches tall, branching type; pods—5 inches long, large broad, slightly curved and pointed; 9 large sweet peas.

DWARF GRAY SUGAR (Edible Pods)—A home garden variety that produces edible pods. Resistant to Fusarium Wilt. Vine—24 to 30 inches tall, pods—2 1/2 to 3 inches long, fairly plump and fleshy. May be eaten when young much the same as snap beans.



PEAS, ALDERMAN

***FIRST and BEST or MORNING STAR or PEDIGREE EXTRA EARLY or JOHN L.**—One of the very earliest. Vine—30 inches tall; pods—2 3/4 inches long, blunt, round, and single; 5 to 7 peas, fair quality. Dry seed, round, white to green, and smooth, about 2,080 per pound.

FREEZONIAN—Similar to Thomas Laxton. Resistant to Fusarium Wilt. Vine—34 to 36 inches; pods—3 1/2 inches long, blunt, single, 7 to 8 large, sweet peas.

GLACIER—An early strain of Thomas Laxton type, resistant to Fusarium Wilt. Vine—30 to 32 inches tall, pods—3 1/4 to 3 1/2 inches long.

GREEN BAYOU—Developed for heat and cold tolerance. Pods are similar to Thomas Laxton; vines somewhat taller.

LAXTONIAN or HUNDREDFOLD or BLUE BANTAM—A large dark-podded variety valuable for truckers, shippers and home gardeners. Vine—18 to 20 inches tall; pods—4 1/4 to 4 1/2 inches long, single, broad, curved and pointed, 7 to 9 large, dark green, oval, tender peas.

LAXTON'S PROGRESS or PROGRESS NO. 9—The best of the large-podded Laxtonian types, uniform in maturity. Vine—16 to 18 inches tall; pods—4 1/2 to 4 3/4 inches long, single, broad, curved and pointed, with 7 to 9 large, dark green, oval, tender peas.

LAXTON'S SUPERB or EARLY BIRD or IMPROVED LAXTONIAN—The earliest of the large-podded dwarf peas, fine for home and market garden. Vine—18 to 20 inches tall; pods—4 to 4 1/4 inches long, curved, pointed, 8 to 9 dark green, round, tender peas.

LITTLE MARVEL—Extensively used for shipping and local marketing. Our stock has a darker vine and pod, much improved over original strains. Vine—18 inches tall; pods—3 inches long, often paired, blunt, plump, 7 to 8 large, tender, sweet, green peas.



ONION SEED FIELD IN FULL BLOOM

Onions

Onion seed should be planted in fertile, well prepared soil very early in the spring. Frost will then help with the weeding.

Plant in 2 foot rows; when the plants reach the green onion size, thin them out to remain two to four inches apart for the production of large or dry onions. Summer seedlings may be made to produce fall green onions.



TABLE COWPEAS,
CALIFORNIA BLACKEYE

MAMMOTH LUSCIOUS SUGAR (Edible Pods)—A home garden variety with large edible pods. Vine—4½ feet tall; pods 4 to 4½ inches long, single, brittle, tender when young.

***METEOR** or **DWARF TOM THUMB** or **RADIO**—An early dwarf, smooth seeded variety with dark green seeds; deserves wider use. Vine—8 to 12 inches tall, small but vigorous; pods—3 to 3½ inches long, single, 7 to 8 peas.

PREMIUM GEM or **LITTLE GEM**—A favorite among home and market gardeners. Hardy and productive. Vine—16 to 17 inches tall; pods—3 inches long, almost round, straight, blunt, with prolonged tip, 6 to 7 medium large, round peas.

TALL MELTING SUGAR (Edible Pods) or **MAMMOTH MELTING**—Superior variety of the edible pod class for home and market garden use. Resistant to Fusarium Wilt. Vine—4½ feet tall; pods—4 to 4½ inches long, single, brittle, tender, fleshy, stringless, fiberless, and of fine quality.

THOMAS LAXTON (DARK PODDED)—Unsurpassed as a freezing variety because of its exceptionally high quality, attractiveness and productivity, also fine garden and market sort. Resistant to Fusarium Wilt. Vine—34 to 36 inches tall; pods—3½ inches long, single, uniform, broad, plump, straight, blunt, 7 to 8 almost round, medium green, tender, sweet peas.

WANDO (Dark Perfection type)—Bred for tolerance to heat and cold; excellent quality for canning and freezing. Vine—24 to 28 inches tall; pods—3½ inches long, straight, blunt, well filled with medium size, dark green peas.

WHITE MARROWFAT (Large)—A late home garden variety. Used dry for soup. Vine—4½ to 5 feet tall; pods—3 to 3½ inches long, single, light green, plump, straight, and blunt, 5 to 6 large, round peas.

WILLETT'S WONDER—A wilt resistant, cold tolerant variety, used in the South for winter planting. Vine is 26 inches tall; pods—3 inches long, rough, borne both singly and doubly, with very small, light green peas.

CROWDER and TABLE COW PEAS

BROWN CROWDER—There are two principal types of Brown Crowder; Brown Sugar Crowder and Alabama Crowder. Both are of very fine edible quality, and are similar in growth habit, being of the half-runner type and setting pods at the crown of the plant. The seed of both varieties is buff-brown with dark eyes.

CALIFORNIA BLACKEYE NO. 5—An improved selection. Pod set is concentrated at crown, pods are held more erect, and the seed is large. In addition, No. 5 is resistant to charcoal rot, cowpea wilt and nematodes. Dry seed is white with black eye and very popular for table use and processing.

DIXIELEE—This new variety is a very good producer under a wide range of conditions. Eating quality is fine, and the peas are especially good for home or commercial canning and freezing. Nematode resistance is very high. The pods are long, and ripen very uniformly, dry seed is somewhat flattened and squarish, brown in color with a darker brown eye.

EARLY RAMSHORN—An early pea of the typical blackeye type, quite similar in most respects to California Blackeye No. 5. Very well liked for its good yield and attractive appearance.

PURPLE HULL—Very popular, notable for the edible pods that turn a vivid dark purple as they mature. Two improved strains, Purple Hull 49 and Bunch Purple Hull, are very suitable for processing and table use. Dry seed color of both types is buff-brown, but Purple Hull 49 has a brown eye and Bunch Purple Hull a maroon eye.

TEXAS CREAM or **CONCH**—A fine variety with attractive cream colored dry peas that make a very fine canned or frozen pack. The plants are upright and prolific and bear oval, light green pods at middle and tip of stems.

PEPPER

Pungent or "Hot" Varieties

ANAHEIM CHILI—Popular in the South and California for canning and drying. Plant is 20 to 24 inches in height, fruit is 6 to 8 inches in diameter. Tapering; flesh, fairly thick, scarlet at maturity.

BATON ROUGE CAYENNE—An improved strain of Long Slim Cayenne, noted for its firm, uniform pods 5 to 6 inches long and ½ to ¾ in diameter. Plant is 25 inches tall, upright, uniform and extremely productive.

FLORAL GEM—A very hot wax pickling variety, readily grown. Plant is 24 to 30

inches tall. Fruit is 2½ inches long, 1 inch in diameter, tapered, smooth; waxy yellow, turning bright red at maturity.

HUNGARIAN WAX (Slim)—An important pickling and canning variety; early. Plant is 12 to 15 inches in height, fruit is 5½ to 6½ inches long, 1½ inches in diameter, tapered, smooth; flesh pungent; color, waxy yellow, becoming bright red.

LONG SLIM CAYENNE (Finger Hot)—A leading variety for drying, grinding and sauces. Plant is 24 to 30 inches tall, upright vigorous, and unusually productive. Fruit is 4½ to 5 inches in length, slender and twisted; very pungent; color, green, changing to brilliant red.

RED CHILI—A really hot variety, used extensively for sauces, pickling, and drying. Plant is 18 inches tall, bushy, heavy producer. Fruit is 2 to 2½ inches long, ¾ inch in diameter at shoulder; color, light green turning to deep red.

Sweet Varieties

ALLBIG—A very large fruited, productive pepper of the World Beater type, developed by the University of Illinois. Well adapted to midwest growing conditions. Plant is of medium height; fruit are 5-6 inches long, 4 inches across at shoulder, 3 and 4 lobed, medium weight.

CALIFORNIA WONDER—The standard of perfection among sweet peppers, because of thick meat, sweet flavor, and dark green color. Plant is 24 to 28 inches in height. Fruit is 4½ inches long, 3½ inches across, 3 and 4-lobed; flesh thick, tender, mild; glossy deep green, changing to brilliant crimson.

EARLY CALWONDER—An early strain of the California Wonder type.

FLORIDA GIANT—A California Wonder selection. Particularly well liked in Florida and the South. Plant is 24 to 28 inches tall, heavy and sturdy. Fruit is slightly larger than California Wonder.

ITALIANELLE (Sweet Italian)—A medium-sized pepper with green fruits of the Neapolitan type and a distinctive sharp taste. Plant is medium small, productive. Fruit is 5 to 6 inches long, about 2½ inches across, bluntly pointed. Flesh is thick and meaty.

KEYSTONE WONDER GIANT—Our elite strain of the Florida Giant type, excellent for gardeners, shippers and canners who require the very best. Plant is 24 to 28 inches tall, heavily productive with abundant foliage. Fruit is 4½ inches long and 3¾ inches across, mostly 4-lobed, flesh sweet and very thick; color glossy green, turning deep scarlet.

KEYSTONE RESISTANT GIANT—Our new mosaic resistant version of our well-known Keystone Wonder Giant. Fruit are large, meaty, and blocky. Plants are very sturdy, and remain upright throughout the growing season. Large leaves and medium dense foliage shade fruit well.

Peas

Peas are a cool season crop, performing best when planted as early as weather conditions will permit and in soil of high fertility.

Plant them in 2 to 3 foot rows, about 2 inches apart in the row and 2 inches deep. If the soil is dry, soaking the seed in water for 6 hours before planting hastens germination. The tall growing varieties do better when grown on stakes or wires.

Table Cowpeas

These make very excellent eating when properly cooked and seasoned. They are particularly esteemed throughout the South. They should be planted and cared for much like green beans, as they prefer warm weather and good fertility.



PEAS, LAXTON'S PROGRESS

LARGE BELL or BULL NOSE or WORLD BEATER—Reliable for the home and market garden. Plant is 24 to 30 inches tall, very prolific. Fruit is 4 to 4½ inches long, 3 to 3½ inches in diameter, flesh thin, sweet, mild; color deep green, becoming scarlet upon maturity.

NEAPOLITAN—A very early narrow variety. Plant is 22 to 26 inches tall, leafy, very productive. Fruit is yellowish medium-green, turning bright red, 4 inches long by 2 inches, almost smooth. Flesh thin, mild.

PIMENTO or PERFECTION—A leading canning variety. Plant is 30 inches tall, late but productive. Fruit 3½ inches long, 2½ inches across, smooth, tapering flesh, thick, sweet, mild; color, rich green, turning to deep scarlet.

RUBY KING or KING OF THE NORTH—Early sweet pepper for home and market. Plant is 30 inches tall. Fruit is 4½ to 5 inches long, 3 inches in diameter, 3-lobed; flesh thin and mild; deep green turning ruby red at maturity.

SWEET BANANA (Yellow)—Our origination, a very early, productive type. We are now growing an improved strain, somewhat shorter than the original and thus more suitable for pickling. Fruit sweet, bright yellow color, 5½ inches long by 1½ inches at shoulder, tapering smoothly to a blunt point, turning bright red at maturity.

WORLD BEATER N. J. No. 13 or RUBY GIANT—Plant is 26 inches tall. Fruit is 4½ inches long and 4 inches wide at base, sweet, medium flesh wall. Mosaic resistant.

PUMPKIN

Pumpkins are considered natives of the western hemisphere, and were cultivated by Indians sometime before the white man arrived. The genetic classification and the popular naming of pumpkins and squash are not consistent. Many varieties commonly known as pumpkin are really squash and vice versa.

Sow the seed after the soil is thoroughly warmed up in hills 4 to 6 feet apart in each direction. Drop 8 to 10 seeds in a hill. Thin to 3 vigorous plants when the plants are about 6 inches tall. Pumpkins are often planted with corn to make good use of the ground available.

CONNECTICUT FIELD or BIG TOM—A standard variety, productive and of good quality. Fruit is 14 inches in diameter; weighs up to 20 pounds; somewhat grooved surface, orange-yellow. Medium thin flesh of light yellow color.

CUSHAW CROOKNECK GOLDEN—Fruit is 20 inches long; weighs 12 pounds; golden yellow, long slender crooked neck; shell, smooth and hard at maturity. Flesh, medium thick, rich yellow, dry, and sweet.

CUSHAW CROOKNECK GREEN STRIPED—Widely grown for stock feed, but makes good pies. Fruit is 20 inches long and 9 inches in diameter; weighs 12 pounds; skin smooth and white, with mottled green stripes; shell, hard. Flesh yellow, thick solid, and fairly fine grained.



PUMPKIN,
CONNECTICUT FIELD

CUSHAW CROOKNECK WHITE or JONATHAN—Similar to Green Striped, but a little better for storage. Fruit is 18 inches long and 8 inches in diameter, weighs around 10 pounds. Flesh is thick fine grained, of good quality.

DICKINSON—A heavy yielder of excellent quality. Fruit is 18 inches long, 12 inches in diameter, uniformly oval shape. Weight up to 25 pounds. Light yellow smooth skin. Flesh is thick, meaty, very rich orange color and excellent, smooth texture.

EARLY SUGAR or NEW ENGLAND PIE—An excellent, small, all around variety. Fruit is 6 inches deep, 8 inches in diameter; around 4 pounds; slightly grooved, very dark orange, hard shell. Flesh is fairly thick, fine texture, orange-yellow, sweet flavor.

JAPANESE PIE—Similar in shape to the cushaw early pumpkins. Fruit weighs around 12 pounds; dark green with lighter stripes. Flesh is yellowish orange, fine grained, of good flavor and quality.

KENTUCKY FIELD—Commonly known and widely grown. A hardy grower, heavily productive and a good keeper. Fruit, variable in size and shape, weighs from 10 to 25 pounds; creamy yellow color. Flesh is yellow, of good texture and flavor.

KING OF THE MAMMOTH or POTIRON—The largest of all pumpkins or squashes. Valuable for stock feed and show purposes. Fruit is 20 inches long and 24 inches in diameter; weighs from 60 to 100 pounds, shell hard; skin mottled orange. Flesh is deep yellow, thick, coarse.

LARGE CHEESE—For home and market use. Fruit is 7 inches deep and 15 inches in diameter, weighs up to 15 pounds; shell hard; skin, deep yellow. Flesh is orange yellow, of fine quality and flavor.

RADISH

Sow the seed very early in the spring, in well prepared soil of good fertility. The rows should be about 1 foot apart, the seed covered with ½ inch of soil. Thin the plants to 2 inches apart in the row, as soon as they are well up. Maintaining rapid growth makes radishes crisp and tender.

Successive sowings can be made at two week intervals.

The Winter varieties should be sown in late summer or early fall as they make their best growth at that time.

California White Mammoth

CHERRY BELLE—Roots are globular, small, uniform, medium cherry red.

CHINESE ROSE WINTER or SCARLET CHINA—The most popular winter variety. Easy to grow; excellent for winter storage. Roots are 5 to 7 inches long, up to 2 inches at shoulder, larger at base; flesh, white, crisp, sweet; color deep rose.

CRIMSON GIANT—A handsome large variety which holds its crisp tender stage over a long period without pithiness. Roots 1½ to 2½ inches in diameter, globular, firm, crisp, excellent flavor; color, attractive crimson.

EARLY SCARLET GLOBE—See Scarlet Globe, Vick's Medium Top.

EARLY SCARLET TURNIP—An old variety, early maturing; used mostly by home gardeners. Roots are round, turnip-shaped, rapid grower; short strong tops, color is dark scarlet.

FRENCH BREAKFAST—Valuable for home and market gardening and for forcing. Very quick growing, becomes pithy quickly. Roots are oblong, blunt, slender tap root, smooth; flesh white, tender; color is rose-scarlet with white tip.

ICICLE—The earliest, most popular long pure white radish. Tops are small, roots are 5 to 6 inches long, slender, smooth. Especially tender and brittle when young, with splendid mild flavor. Color is snow white throughout.

LONG BLACK SPANISH—Desirable winter radish as it is a splendid keeper. Roots are 8 to 9 inches long, 2½ inches in diameter, with rather rough skin; flesh white, crisp, solid, and mildly pungent; color is black.

LONG BRIGHTEST SCARLET or CARDINAL—The best long red shipping, market, and garden sort. Roots are 4½ to 5 inches long, slender, smooth, tapered, crisp and tender, bright scarlet with white tap root.

ROUND BLACK SPANISH—An excellent winter radish with large, round, solid roots. Frequently sliced and served with beer. Roots are globular to oblate, up to 4 inches across; flesh white, crisp, mildly pungent flavor, color black.



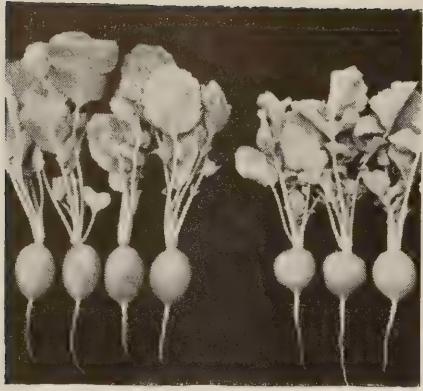
PEPPER, KEYSTONE RESISTANT GIANT

Peppers

Plant the seed early indoors, or in hot beds, and when the plants are about 4 inches tall transplant to the field in rows 2½ feet apart. Set the plants 2 feet apart in the row.

Peppers respond well to high fertility and to a side-dressing when the plants are about 6 to 8 inches tall. Extremely hot weather will cause poor fruit set, but the plants will resume setting fruit when more moderate weather returns.

Incidentally, you will find that the sweet types of pepper have their best flavor, both for salads and for stuffing, when a little red begins to show on the pods.



SCARLET GLOBE VICK'S MEDIUM TOP RADISH, SCARLET GLOBE SHORT TOP.

SCARLET GLOBE, SHORT TOP—This special strain has shorter tops than Vick's Scarlet Globe. Used for greenhouse forcing and for summer crops when less top growth than obtained with other strains is desired. Roots are globular, uniform, smooth; color, entirely bright scarlet.

SCARLET GLOBE, VICK'S MEDIUM TOP—An important strain with refined medium length top which is most desirable for cool season growing. Roots are olive shape, uniform, smooth; with excellent crisp, white fine quality flesh; color is brilliant scarlet.

SPARKLER WHITE TIP or **EARLY SCARLET TURNIP WHITE TIP**—Popular in home and market gardens. Tops are small, roots are round to oblate, smooth, of fine quality; color, upper portion scarlet, lower third white.

STRASBOURG or **ST. LOUIS WHITE SUMMER**—Well known summer radish adapted to growing in hot weather. Roots are 5 inches long, broad shouldered, entirely white, smooth, with firm, crisp flesh.

RHUBARB

VICTORIA—The standard main crop variety, producing a great many long, thick, tender stalks, crimson shading to green, pleasant, tart flavor.

SALSIFY

The flavor of the roots of Salsify has earned it the name of "vegetable oyster." The roots can stand freezing and therefore, may be harvested in the fall or throughout the winter. Roots are boiled in preparation for the table.

Sow the seed in the early spring in 18 inch rows and thin the plants to stand 4 or 5 inches apart in the row. A deep, rich soil, well prepared, is desirable.

MAMMOTH SANDWICH ISLAND—Produces large, uniform, smooth, high quality, creamy white roots. The standard variety for home and market gardeners and shippers.

SPINACH

BLOOMSDALE DARK GREEN—The leading all around variety; extensively used for shipping, local market, and for canning and freezing. Plants are vigorous, upright, compact; leaves are medium large, savoyed, rounded, rich dark green.

BLOOMSDALE LONG STANDING—Similar in appearance to other Bloomsdale strains, a few days later, but will stand from a week to ten days longer before forming seed stalks, which makes it better for late spring or summer crop and for over-wintering.

GIANT NOBEL—Outstanding variety of the giant thick smooth-leaved group. Early, slow to bolt. Plants are large and spreading, leaves are very large, broad arrow shape, tender, curled in early stages, bright green.

NEW ZEALAND—A distinct sort, not a true spinach. It will thrive on poor soil or in extreme hot weather not suitable for ordinary spinach. Leaves should be plucked individually thus permitting continued production. Seed somewhat difficult to germinate. Plants are tall, spreading, and bush-like; plant in 3-foot rows. Leaves are small, thick, fleshy, pointed, deep green; of fine spinach flavor.

OLD DOMINION, Blight Resistant—Resistant to mosaic and somewhat longer standing than Virginia Savoy, replaces Bloomsdale where blight or mosaic is a factor. Plants are similar to Bloomsdale, except slightly smoother appearance, and a little flatter spreading growth.

VIKING or **HEAVY PACK** or **NORTHLAND**—Known for its large, leathery dark green leaves and heavy production. Very similar to Giant Nobel but slightly darker. Plants are hardy, vigorous, spreading, but with short petioles.

VIRGINIA SAVOY or **BLOOMSDALE BLIGHT RESISTANT**—Valuable for fall planting when blight mosaic is most severe. Grows and matures a crop in the fall when other varieties fail, but in spring bolts to seed quickly. Plants are fairly upright tending to hold leaves off ground. Leaves are similar to Bloomsdale.

VIROFLAY—A very large, medium early, smooth-leaved spinach, not long-standing. Extensively used for the West Coast canning crop producing a characteristically lighter green product.

SQUASH

Summer Varieties

COCOZELLE, LONG—A bush type summer squash, delicious when eaten in immature stage. Fruit is dark green when immature.

changing to striped dark green and yellow at maturity; shape, cylindrical and straight, with smooth surface. Flesh is greenish white, of fine flavor.

EARLY PROLIFIC STRAIGHTNECK—Valuable market and shipping bush squash. A good producer, should be harvested very young; fruit is 12 inches long, 3½ inches in diameter when mature, smaller toward stem end; clear yellow color. Flesh is white, fine grained, delicately flavored.

EARLY SUMMER CROOKNECK—The most widely used of the summer squashes. Yields profusely on a bush type vine. Fruit is 10 inches long and 3½ inches in diameter when mature; small crooked neck. Skin light yellow when in young edible stage, becoming orange and warty. Flesh is creamy white, fine textured, noted for fine quality.

EARLY WHITE BUSH SCALLOP or **PATTY PAN**—Still the leading white summer squash. Fruit used when immature (about 3 inches by 8 inches in size). General shape round with scalloped edges, flattened; white in color. Flesh is white, fine grained, and well flavored when young.

WOODS PROLIFIC—Characteristically variable in uniformity. Fruit generally cream to white like Bush Scallop, with occasional green striped fruit with little to no scalloping. Flesh is white, solid, fine grained.

ZUCCHINI, BLACK—A small, attractive, Italian Marrow type. Delicious when harvested immature. The contrast between the dark green outer color and pure white flesh is very appealing. Mature fruits smooth, cylindrical, entirely dark green, about 12 inches long and 4 inches in diameter. Flesh is white, of fine quality and flavor.

ZUCCHINI, GRAY GREEN—Similar to Zucchini Black except fruit is slightly smaller and mottled gray-green. Use when young and tender. Mature fruits 12 inches long and 4 inches in diameter, almost cylindrical. Flesh-white, of fine quality.

Fall and Winter Varieties

BANANA, PINK—A fine flavored squash, limited in use because of its soft shell and poor keeping qualities. Fruit is 20 inches long and 6 inches in diameter, cylindrical; skin grayish green, turning pink at maturity; flesh is light orange, thick, delicious flavor.

BUTTERCUP—A late variety with good keeping ability. Very good for baking. Fruit is 7 inches in diameter, 4 inches deep, weight 3 to 4 pounds. Color, grayish-green, blossom scar prominent. Flesh is thick, orange, dry, sweet.

BUTTERNUT—A winter variety, excellent for pies, boiling or baking. Fruit is elongated pear shape; 8 to 10 inches long, weight 2½ to 4 pounds. Color, yellowish-cream. Smooth, hard skin, good keeper. Flesh is solid, rich yellow, dry, sweet.

Spinach

Best crops of Spinach are obtained during the shorter day length and cooler portions of the growing season. In cooler sections of the country this will be the early spring and late summer; in the warmer sections, Spinach can be planted in the very early spring, the late summer for fall harvest, and fall for overwintering. Ample moisture and very fertile soil are required. The further application of fertilizer both when planting and as sidedressing will help greatly. Sow the seed in 12 inch rows, 1 inch deep. Thin the young plants to stand 5 to 6 inches apart in the row.



SPINACH TRIALS AT KEYSTONE VALLEY FARM



SQUASH, BUTTERNUT

HUBBARD, BLUE—Desirable for its high quality. Fruit is 12 inches long and 9 inches in diameter, with a neck at both ends. Rind blue-gray, hard, thick, moderately waxed; flesh is thick, orange yellow, fine texture and flavor.

HUBBARD, GOLDEN—Suitable for canning because of the color and fine quality of its flesh. An excellent keeper. Fruit is similar to Blue Hubbard except reddish orange in color. Flesh is a deep yellowish-orange, thick, dry, of excellent quality.

HUBBARD, IMPROVED—The standard for home, market garden, and shipping. Fruit—12 inches long and 9 inches in diameter; weighs around 12 pounds; shell, thick and hard, surface moderately roughened, deep green; excellent keeper, sweet, delicious. Flesh—Orange-yellow, thick, dry, sweet, delicious.

HUBBARD, WARTED—Similar to Hubbard Improved, but thickly covered with warts.

TABLE QUEEN or **MAMMOTH ACORN**—A truly fine squash of delicious flavor. Just the right size to cut in half, bake and serve to two people. Fruit—5½ inches long and 4 inches in diameter, uniformly ridged; shell, thin and hard, smooth, dark green; flesh, orange-yellow, pleasing sweet flavor.

WINTER CROOKNECK GOLDEN—For description refer to *Pumpkin, Cusshaw Crookneck Golden*.

TOMATO

BONNY BEST—An old standard early variety, still used by market gardeners. Vines—open, prolific, medium height. Fruit—scarlet red, oblate, medium sized, tart.

BREAK O'DAY (Red)—Used by some truckers and shippers for its wilt resistance, earliness, and absence of growth cracks. Vines—prolific, open and spreading. Fruit—globe shaped, smooth, large light scarlet.

CORNELICROSS A (Hybrid)—Hybrid vigor and heavy production of large, smooth, fruit are the advantages of this true first generation (F₁) Hybrid. Vines—vigorous, heavy foliage. Fruit—globe-shaped, deep scarlet color, very solid and meaty.

CORNELIEFFTWO (F₂ Hybrid)—Our entry in the F₂ tomato field; advantageous because of its uniformly higher yield, ripening eight to ten days ahead of Rutgers. Vines—vigorous, upright, medium dense. Fruit—deepened globe, large, smooth, solid, bright red.

DWARF CHAMPION (Tree Tomato) — A dwarf variety desirable for home use because of upright growth. Vines—“Tree” type, compact, upright, dark green foliage. Fruit—pinkish purple color, flattened globe shape, smooth, solid, medium size.

EARLIANA (Red)—Widely grown because of its extreme earliness. Vines—medium to small, but vigorous, open, spreading. Fruit—bright scarlet, medium sized, nearly globe-shaped, thick skinned.

GARDEN STATE IMPROVED (Red)—Somewhat similar to Rutgers but plant growth more compact and fruit slightly flatter. Matures most of its crop early season. Tolerant to late blight. Vines—semi-upright, vigorous, and protective. Fruit—oblate, scarlet firm, fine quality; hold well after ripening.

GOLDEN QUEEN (Yellow) — Suggest *SUNRAY*

GROTHEN'S GLOBE (Strain No. 2) (Red)—A leading green wrap shipping variety. From 10 days to two weeks earlier than Rutgers; responds favorably to heavier applications of fertilizer without excessive vegetative growth. Similar to *Break O'Day*, but better color. Vines—fairly open growth, medium length, leaves featherly. Fruit—medium large, globe-shaped, bright scarlet, solid interior ripens slowly, retaining firmness.

GULF STATE MARKET (Pink)—An excellent shipping variety, also fine for market use. Vines—medium size, strong, hardy, shade fruit well. Fruit—crimson pink, medium large, meaty, solid, globe shaped, flavorful.

HOMESTEAD (Step 89) (Red)—A new variety showing near-immunity to Fusarium wilt and great promise as a shipper in the Southeastern states. Vines—dense foliage, semideterminate habit. Fruit—of the general shape, size, and quality of Rutgers, with a lighter green shoulder.

INDIANA BALTIMORE (Greater Baltimore) (Red)—Most uniform, desirable strain of the Greater Baltimore type. Vines—large, vigorous, semi-erect. Fruit—deep-flat, large, solid, smooth and of deep red color.

JUBILEE (Yellow)—Suggest *SUNRAY*

LIVINGSTON GLOBE (Pink)—Widely known as a standard tomato for market and home use, and for forcing. Vines—medium large, light green, prolific, sturdy. Fruit—purplish rose, globe-shaped, smooth, attractive.

LOUISIANA DIXIE or **LOUISIANA PINK** (Pink)—Developed for resistance to Fusarium wilt. Vines—vigorous, rather open, dark green, prolific. Fruit—pink, deep-flat shape, medium size, firm; fine flavor.



TOMATO, CORNELICROSS A

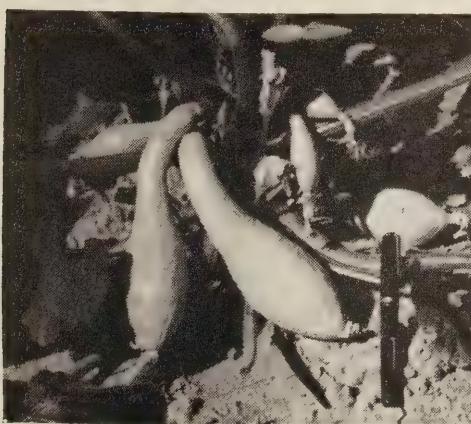
MANALUCIE (Red)—A new Florida introduction, representing a fine piece of breeding work in that the plants are resistant to five of the major tomato diseases, including Fusarium wilt and early blight. Plants very vigorous and sturdy, with heavy foliage. Fruit large, solid, meaty, of deepened globe shape and bright scarlet color.

MANASOTA (Red)—Resistant to Fusarium wilt and partially resistant to *Stemphylium* blight. Vine—large, rather open, foliage less dense than Rutgers. Fruit—medium large, globe-shaped, deep scarlet.

MARGLOBE (Red)—This still popular variety was the first to possess fine commercial qualities and show tolerance to Fusarium wilt and nailhead rust. It was used by plant breeders to impart its qualities to many subsequent varieties. Does best on fertile soils with ample moisture. Vines—vigorous; heavy dark green foliage shades the fruits well. Fruit—deep scarlet, globe-shaped, thick skinned, smooth and solid; delicious, mild flavor.

OXHEART (Pink)—Fruit has a novel heart shape that makes it a special attraction for home and market gardeners. Vines—Rather large, late. Fruit—Pink, heart-shaped, very solid, large, meaty; appealing flavor.

PAN AMERICA (Red)—Bred for resistance to nailhead rust and near immunity to wilt, this variety has become widely used. Vines—strong, good fruit coverage. Fruit—globular, medium large, smooth, bright scarlet; thick flesh walls.



SQUASH, EARLY SUMMER CROOKNECK

Squash

All varieties of squash require warm growing weather, withstanding continued hot weather very well, but easily killed by frost.

The bush varieties should be planted in hills 2 feet apart in rows 4 feet apart. The vine squash varieties should be planted in hills 6 feet apart each way.

Plant about 6 to 8 seeds in a hill, covering with 1 inch of soil. Thin each hill to 3 or 4 of the most vigorous plants.

The summer squash varieties are most delectable when harvested very young, preferably 4 to 6 inches in length. Winter squash, on the other hand, are best when fully grown and after the shell has hardened.



TOMATO, SUNRAY

PONDEROSA or **BEEFSTEAK** (Pink)—A late, large-fruited variety; a favorite in the home garden. Vines—large, coarse, spreading, medium green foliage. Fruit—purplish pink, flat, solid, very few seeds; meaty flesh.

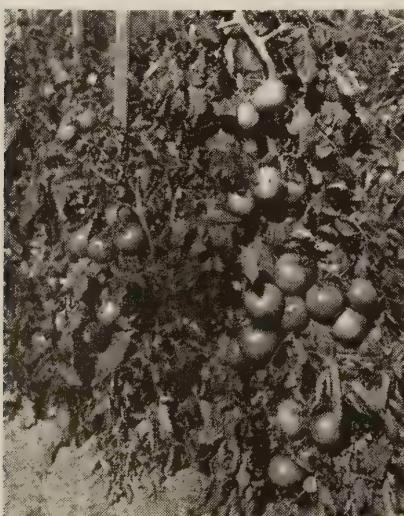
PRITCHARD (Red)—A popular wilt tolerant variety. AAS G. M. 1933. Vines—medium size, self-topping, vigorous, with fairly heavy foliage. Fruit—smooth, globular; medium scarlet color; thick walls and solid flesh; mild flavor.

RUTGERS (Red)—Widely used for market, shipping, canning and home garden. Total acreage greater than any other variety. Resistant to Fusarium wilt. Vine—medium large, vigorous, with dense dark green foliage which protects fruit well; productive over a long period. Fruit—large, smooth, globe-shaped, with deep scarlet color ripening from the interior; thick interior and exterior flesh walls.

SAN MARZANO (Red)—This small-fruited Italian type is used for making tomato paste. Vines—medium large, somewhat open, vigorous, prolific, bears fruit in clusters. Fruit 2½ to 3 inches by 1½ inches; stemless, deep scarlet, very mild; has two cells with very little juice and fleshy thick walls.

SIOUX or **EARLY RED** (Red)—This early variety is adapted to soils of high nitrogen content, northern areas, and higher elevations. Vines—medium size, somewhat open; very productive. Fruit—medium size, globe-shaped, scarlet, fine quality. Flesh firm, with thick walls.

SOUTHLAND (Red)—Resistant to Fusarium wilt, and certain forms of late blight. Vines—vigorous, compact, with abundant medium green foliage; productive. Fruit—medium size, flattened globe, usually smooth, but under some conditions catfaced. Rich red color, firm texture.



◆ **TOMATO, MANALUCIE**

STOKESDALE (Red)—An all around second early tomato, widely grown. Vines—medium heavy foliage, moderately spreading but with sufficient coverage. Fruit—medium large, smooth, almost globe-shaped, bright scarlet; flesh firm.

STONE IMPROVED (Red)—Our Keystone strain is somewhat earlier than the original Stone. Vines—vigorous; heavy foliage. Fruit—scarlet red, large, deep-flat, solid, smooth.

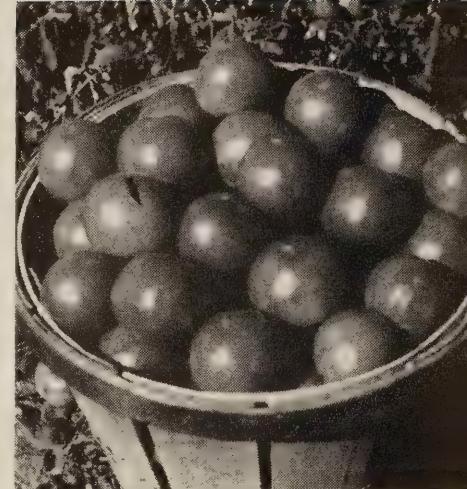
URBANA (Red)—Our own promising introduction. Its fruit are borne abundantly on a compact, determinate vine. Out-yielded all other tomatoes three years in a row in the STEP trials of Southern experiment stations. AAS H. M. 1951. Vines—many short branches spread about 24 to 36 inches; bears heavily, good foliage protection. Fruit—medium size, smooth globe; flesh deep scarlet, with thick walls and small seed cavities.

SUNRAY (Yellow)—Similar to Golden Jubilee, but with high Fusarium wilt resistance. Vines—sturdy, compact, not determinate in growth. Fruit—golden orange with a pink blush, deep oblate with smooth shoulder. Fruit walls heavy, seed cavity small. Flavor mild.

VALIANT (Red)—An early large-fruited market variety. Vines—Spreading and somewhat open, of medium size, vigorous and productive. Fruit deep globular, bright scarlet, meaty, mild flavored.

VICTOR or **BOUNTY** (Red)—An early variety for home and Northern market gardens. AAS B. M. 1941. Vines—determinate, require small space. Fruit—medium to large, scarlet red, thick walled.

WISCONSIN 55 (Red)—A productive early tomato developed for the short season in Northern areas. Vines—medium large,



TOMATO, URBANA

spreading, fair foliage cover. Fruit—medium to large near globe, scarlet red. Thick walls, meaty flesh, small seed cavities.

YELLOW PEAR (Yellow)—Popular as a home garden or preserving variety. Has tall growth of vine, bearing large clusters of small pear-shaped, golden fruit.

TURNIPS

Ancient writings indicate that turnips have been used by man for over 4,000 years; they are still one of our most popular vegetables. For high quality, the roots must be grown rapidly in fertile soil and should mature during cool weather.



TURNIP SEED FIELD IN FULL BLOOM

Staking Tomatoes

Tomatoes unstaked produce more fruit, but require more space as the plants are weak and sprawling.

Allow 4 feet apart each way unstaked. When tomatoes are allowed to run on the ground, mulching is a good practice. A 2 or 3 inch layer of hay, straw, old leaves, lawn rakes, or anything of the sort retains the moisture in the soil, smothers weeds and keeps the fruit clean. One method used to keep the tomatoes off the ground is a low wood trellis. Another practical way is use of a barrel hoop, supported about 18 inches above the ground by stakes (3 to each hoop). However, staked tomato plants are probably best for the home gardeners as space is saved. Tie each plant to a 6 foot stake and pinch off superfluous leaves. Set plants 2½ feet apart each way.

Plant the seed $\frac{1}{2}$ inch deep in 1 foot rows, thin the young plants to stand 5 inches apart. Successive plantings can be made for continuous supply.

AMBER GLOBE—Principally used for stock feed but the young roots are usable for the table. Hardy, a very good keeper. Tops—medium large, cut-leaved. Root—5 to 6 inches across, round, smooth skin yellow with greenish top. Flesh, light yellow, and of good quality.

COWHORN—For stock feed, but good for table use when young. Tops—medium to large, upright, medium green, cut leaved. Root—10 to 12 inches long, $2\frac{1}{2}$ to 3 inches across at shoulder, somewhat crooked, white with greenish shoulder, of sweet flavor.

EXTRA EARLY PURPLE TOP MILAN—One of the earliest turnips. Tops—small, upright, strap leaved. Root—3 to $3\frac{1}{2}$ inches across, smooth upper portion purplish-red; lower, white; flesh, white, tender and sweet when young.

GOLDEN BALL or ORANGE BALL—For home garden and local market. Tops—small, cut leaved. Root—about $3\frac{1}{2}$ inches across, globular, smooth, orange-yellow with yellow, fine grained flesh.

POMERANIAN WHITE GLOBE—Good for table use when young. Produces large feed crop. Tops—large, coarse cut leaved. Root—4 to 6 inches across, globular. Flesh—clean white, coarse, fair quality.

PURPLE TOP, STRAP LEAVED—For spring and fall planting. Early, with fine edible qualities. Tops—medium small, erect, slender strap leaved. Root—3 inches across, uniform, purplish-red above ground, white below, smooth. Flesh—white, fine textured, sweet.

PURPLE TOP WHITE GLOBE—Used more than all other varieties combined. Productive, fairly early, and of fine quality. Tops are for greens and canning. Tops—medium large, dark green, erect, moderately cut-leaved, fine flavored. Root—4 to 5 inches across, globe-shaped, upper portion bright reddish purple, pure white below, smooth. Flesh—white, tender, fine textured, delicate flavored.

SEVEN TOP or SOUTHERN PRIZE—A foliage turnip, noted for winter hardiness and abundance of good quality leaves. Best greens are from young plants. Tops—quite spreading. Root—not edible.

SHOGOIN—Principally used for greens, but also produces fine quality roots. Non-curling leaf growth increases aphid resistance. Tops—bright green, upright, rapid growing, large tender leaves. Root—large, snowy white; flesh, white, mild, tender, when young.

TOKYO MARKET—An old favorite, because of its sweet flavored, solid, tender root,

and earliness. Tops—medium size, semi-erect, medium green color. Root—pure white, 2 inches across and $1\frac{1}{4}$ inch in depth at marketable stage.

WHITE EGG—For spring or fall planting. Medium early. Tops—medium sized, erect, cut leaved. Root— $2\frac{1}{2}$ inches across, 3 inches long, grows partly above ground. Smooth, thin, white skin; flesh white, crisp, tender and sweet.

WHITE FLAT DUTCH—An early variety principally used by home and market gardeners, especially in the South. Tops—small, erect, compact, strap leaved. Root—3 or more inches across, entirely white, smooth. Flesh—firm, tender, sweet.

RUTABAGA or SWEDISH TURNIP

AMERICAN YELLOW, PURPLE TOP—An excellent variety for home, market gardeners, and storage. A good keeper, productive, and early. Root—large, globular, yellow with purple top; flesh, tender, crisp, fine textured, sweet, light yellow.

WATERMELON

BLACK DIAMOND—See Florida Giant.

BLACKLEE (Wilt Resistant)—Resistant to Fusarium wilt. Is prolific, uniform, carries well in transit. Fruit—medium large, blocky, cylindrical; rind dark green, thin, tough; flesh deep red, fine-grained, firm; seed, black.

CONGO—An Anthracnose resistant variety for the Gulf Coast and Southeastern states where Anthracnose frequently kills the vines. Yields well; resistant to wilt and mildew. Fruit—large, long, cylindrical, with dark stripes on medium green background. Flesh solid, crisp, sweet. Seeds light tan with dark brown edge.

DIXIE QUEEN (Wilt Resistant)—A splendid melon which matures to an ideal size and produces very heavily. Excellent for shipping and home garden. Fruit—almost round, around 30 pounds; rind thin, tough with light green stripes; flesh, fine grained, lusciously flavored, rich scarlet; seeds, small and white.

FLORIDA GIANT or BLACK DIAMOND or CANNONBALL—Currently the leading melon. Fruit—large oval, commonly 50 pounds. Very dark green rind with bluish bloom; flesh bright red and of very sweet and delicate flavor. Seeds, mottled brownish black.

GARRISON or DARLINGTON or COKER—A very productive variety with excellent flavor. A poor shipper. Fruit—cylindrical, large (up to 40 pounds), with tender, thin rind. Greenish white with dark green stripes. Flesh tender, crisp, sweet. Seeds white with brown tips.



WATERMELON, DIXIE QUEEN

GEORGIA RATTLESNAKE—An old southern favorite similar to Garrison but with thicker rind. Fruit—long, weighing up to 30 pounds; rind, very tough, yellowish green with dark green stripes; flesh, red, fine grained, delicious; seeds, cream colored with brown tips.

HAWKESBURY (Wilt Resistant)—Developed in Australia. A wilt resistant Irish Grey type. Good shipper. Fruit—large, oblong shape, light grayish green with slight veining, tough rind; flesh, dark red, very sweet and fine textured. Seeds brownish black.

IRISH GREY—Suggest Hawkesbury.

KLECKLEY'S NO. 6 (Wilt Resistant)—This melon combines a high degree of wilt resistance with fine quality of regular Kleckley. To get maximum stand, delay thinning until small plants have grown past danger stage. Fruit—large cylindrical, deep red flesh with fine sweet flavor.

KLECKLEY'S SWEET or WONDERMELON or MONTE CRISTO—A favorite for local use. Fruit—large, cylindrical, weighs up to 35 pounds; rind, thin and brittle, dark green in color; flesh, tender, crisp, melting, fine grained, superb flavor, brilliant red; seeds, white. Not a shipper.

NEW HAMPSHIRE MIDGET—Recently introduced, this melon is aptly named, measuring 5 x 6 inches when mature. Intended for use by small families and desirable for its ease of handling, it is also valuable in the North because of its earliness. Flesh red, of medium quality, with a thin rind. (AAS G.M. 1951.)

TOM WATSON—An old productive favorite. Fruit—cylindrical; weighs up to 40 pounds; rind, tough and elastic, medium green, slightly veined; flesh, firm, rather coarse, delicious, light red color; seeds, white mottled brown.



Watermelon

Watermelons require a long, warm growing season. Sandy soil is preferred, along with good fertility and moisture. The crop should be kept growing steadily to prevent the formation of second growth or "white heart." Plant the seed in well prepared soil when the weather is warm. Plant in hills 8 to 10 feet apart, sowing 8 to 10 seed in a hill and covering to 1 inch. When the plants are established, thin each hill to 3 or 4 good plants.

Careful Thinning Increases Yields

There is no satisfactory way to avoid thinning. When too many come up, be thankful and consider the thinning out as an opportunity to select the best plants as the ones to survive. For best results, thinning should be done gradually. In case of a crop which grows best when the plants stand four inches apart, do not at first thin it to one plant for each four inches. It is foolish to discard all excess plants prematurely when accidents, insects or disease may destroy many which are left. If thinning is done by stages as the plants grow, they will finally stand at the optimum distance from each other, and there will be small chance of vacant spaces in the row. Lettuce plants, thinned to stand an inch apart, will soon reach a size when alternate plants can be removed to make a salad; and this process may be continued until the spacing is right for the remaining plants to mature. Carrots may be thinned the first time when they are as thick as a pencil; and a dish of the thinnings will give those who have never eaten such tiny carrots before, a new idea of this vegetable. Beets may be allowed to grow until about six inches tall, when their roots have just begun to swell.

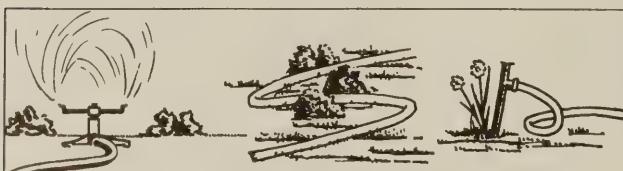
The Importance of Correct Watering

Except for transplants, try to avoid watering the garden until it really **needs** water. When you do water, **soak**, don't sprinkle. Do a thorough job. The hose or sprinkler should be allowed to run on one spot until the water stands on the surface in a pool.

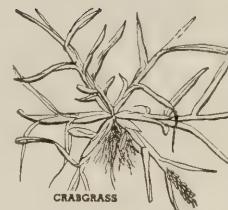
After watering, the soil should be moist to a depth of five to six inches. Check this with a spade or a stick to be sure. Never apply water with such force that the top soil is washed away. Use an "Iri-gator" which allows water to ooze through the pores, or remove the nozzle of the regular hose and let the stream run out on a board. Another effective method of good soaking is to allow the water to run off a paper sack.

Overhead sprinklers do waste some water, but also, **they do prevent washing**. Watering in the evening or early morning means that the moisture sinks in and is absorbed by the soil before it can evaporate.

Watering tomatoes calls for special care. Cracks and "blossom end rot" (the free or blossom end turning black) are both caused by fluctuating water supply. Never let tomatoes be dry one week and wet the next. Tomatoes must be kept either moist constantly or be grown in dry soil, without artificial watering.

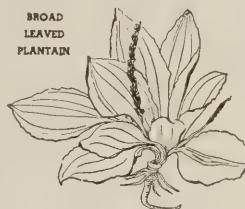


WEEDS THAT INFEST THE LAWN



Crabgrass

An annual. Spreads by seeds. Mow often at 1½ inches. Hand pick young seedlings. Feed lawn heavily in the fall.



Broad Leaved Plantain

A perennial. Use hormone-type weed killer in late summer or drop acid or gasoline in centers of rosettes.



Quack Grass

Perennial. Spreads by creeping, jointed rootstalks. Smother with mulch or remove all visible shoots three times a week as long as they show.



Dandelion

An annual spread by seeds and from the crown. Cut below crowns any time of the year. Drop gasoline in crowns. Spray with hormone-type weed killers.



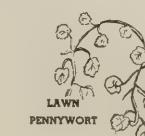
Ground Ivy

Perennial. Dig out or spray with a sodium chlorate solution.



Narrow Leaved Plantain

Perennial. Prolific seeder. Cut off tops, pierce a hole in the crown of the root and apply a few drops of carbolic acid or sodium chlorate.



Lawn Pennywort

A perennial weed. Seeds are distributed by lawnmower and rake. Must be dug out and ground re-seeded or sodded.



Yellow Foxtail

An annual. Must be cultivated frequently. Use chemical weed killer.



Heal All

Perennial, especially bad in shady lawns. Roots at nodes and spreads by seeds. Cut out by hand or spray with hormone-type weed killer after bluegrass is dormant.

Yarrow

Perennial. Cut back repeatedly or dig out. Spray lawn with sulphate of iron.

INSECTS THAT ATTACK THE GARDEN

Consult your state experiment station for more specific control measures.



TYPE	NAME	DAMAGE	CONTROL
SUCKING	RED SPIDER MITE	Causes brown blotches on leaves	Dust or spray with wettable sulphur or certain of the new miticides
	LEAF HOPPER	Gives leaf tips scorched, puckered appearance	Control with chlordane or lindane
	APHIDS	Cause leaf curling, malformed flowers and weak plants	Lindane, rotenone or P-R mixture
	STRIPED CUCUMBER BEETLE	Feeds on leaves, spreads cucumber wilt disease	Dust seedlings and keep new and old leaves coated with methoxychlor or P-R mixture
CHEWING	CUT WORM	Cuts off plants at soil level	Wrap 3-inch cardboard collar loosely around newly set plants
	JAPANESE BEETLE	Skeletonizes leaves, ruins foliage	Dust or spray with 5% DDT and keep coated
	FLEA BEETLE	Chews sieve like holes	Use DDT, methoxychlor, P-R mixture or cryolite up to one month before harvest
BORERS	CORN BORER	Bores into stalks and base of ears	Dust with 1% rotenone or fixed nicotine dust
	SQUASH BORER	Feeds in the stem and destroys plants	Spray or dust with rotenone or nicotine

PROPER TOOLS CAN SAVE TIME AND LABOR

Every gardener needs a good hoe, and preferably two. While the regular field or garden hoe has millions of friends, the square top onion hoe does more types of work, weighs less and does everything the field hoe will. This onion hoe has a blade less than two inches high, hence it does not move a mass of soil. Soil flows over it easily, reducing the effort needed to use it. Because of its narrow width, the end can be used to thin plants in the row. The old idea that the deeper you stirred the soil, the better, has been cast aside, completely. To cultivate in the modern manner you first sharpen the hoe blade as a cutting tool.

The four-tined cultivator digs in with an easy, pulling motion. The working depth of the tines is 4 inches for the standard model. Another good cultivator of the garden is the three-tine junior, which is light in weight and easy on the back. For deeper cultivation, the five-pronged garden cultivator with long handle will do practically everything a wheel hoe cultivator will, though not as rapidly. It is the logical tool for the smaller garden. It should not be used too late in the season, however, after plant roots have begun to spread out between the rows.

For breaking up heavy clay soils, many gardeners like a spading fork. The tines go in easier and the clods tend to break easily when pried out.

The choice of a digging tool is a matter of personal preference, but those who have not used the long-handled, round pointed shovel should try this tool. Because of its long handle, it gives greater leverage, which means less work for the back and arms of the digger. While it is called a shovel and can be used for shoveling loose soil, it is equally good for spading and turning over the soil.



KEYSTONE SEEDS

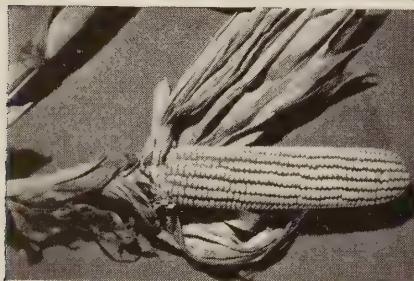
FOR LAWN AND FARM

FIELD SEED



SUN-CURED-TRIPLE CLEANED

HYBRID CORN



CAREFULLY BRED FOR MODERN
FARMING

LAWN SEED



THOROUGHLY PROVEN IN TRIAL
PLOTS, GOLF COURSES AND
HOME LAWNS

HOW TO BUILD A LAWN OF PERMANENT BEAUTY



SEEDING RATE

If you are building a new lawn, sow our best LAWN SEED at the rate of 1 pound per 300 square feet.

If you already have a lawn but want to improve it, sow 1 pound LAWN SEED per 500 to 1000 square feet, depending on the present stand of grass. LAWN SEED may be sown anytime of the year, but preferably in the early Spring or early Fall.

FEEDING

A complete fertilizer applied at the rate of 4 pounds per 100 square feet will supply plant nourishment not found in manure. Both are necessary. We feature the best of these prepared plant foods. Use them to build the new lawn or to rejuvenate soil in established lawns. Spread at above rates in Spring and Fall, but be sure grass is dry and during extreme hot weather apply only 2 pounds per 100 square feet.

CUTTING & WATERING

Set your lawn mower high so that it will leave your grass at least $1\frac{1}{2}$ inches high—preferably 2 to 3 inches. Many lawns have been ruined by cutting too close.

See your dealer
for the latest
complete list of
varieties and
prices

The new lawn should be watered every day until the young grass seedlings have matured and have spread. Then watering should be discontinued. Sprinkling an established lawn encourages crabgrass. If you feel you must apply water, be sure it soaks down 4 to 6 inches deep.

FIELD CROPS PLANTING CHART

KIND OF SEED	Lbs. per Std. Bu.	Rate to Sow Lbs. per Acre	† Approx- imate number of seeds per pound	Time to Sow	Depth to Sow Inches
Alfalfa—broadcast.	60	18 to 22.	22'1009925	Spring & ea. Fall.	1/2 to 1
Alfalfa—drilled.	60	12 to 15.	225000	Spring & ea. Fall.	1/2 to 1
Barley, Spring.	48	96 to 120.	.....	March, April.	1 to 1 1/2
Barley, Winter.	48	96 to 120.	13500	Aug. to Oct.	1 to 1 1/2
Beet, Mangel Stock.	30	6 to 8.	13500	April, May, June.	1
Bermuda Grass.	40	5 to 6.	26100	March to May.	1/2
Birdsfoot Trefoil.	60	3 to 5.	1773000	Fall & Spring.	1/2
Black Medic.	60	18 to 20.	366300	Feb., March, April.	1/2
Blue Grass, Ky., for lawns.	14*	90 to 125.	263700	Each Spring, each Sept.	1/2
Blue Grass, Ky., for pastures.	14*	15 to 20.	2160000	Each Spring, each Sept.	1/2
Brome Grass.	14*	12 to 18.	2160000	Spring & Fall.	1/2 to 3/4
Buckwheat.	52	50 to 60.	135000	Late Spring.	1 to 1 1/2
Carpet Grass.	18	8 to 10.	20250	Jan. to June.	1/2
Clover, Alsike.	60	5 to 6.	.....	Winter to April.	1/2 to 1
Clover, Alsike & Timothy mixed.	.....	10 to 12.	675000	Winter to April.	.....
Clover, Burr.	12	30 to 40.	.....	August, Sept., Oct.	1/2
Clover, Crimson.	60	12 to 15.	22050	July to Oct.	1/2 to 1
Clover, Hop.	60	4 to 5.	148500	Feb., Mar., Apr., Sept.	1/4
Clover, Ladino.	60	1 to 3.	2445300	Spring, Fall.	.....
Clover, Mammoth.	60	6 to 10.	871650	Winter, early April.	1/2 to 1
Clover, Mammoth in mixture.	60	4 to 6.	270000	Winter to April.	1/2 to 1
Clover, Red.	60	6 to 10.	.....	Winter, early April.	1/2 to 1
Clover, Red, in mixture.	.....	4 to 6.	270000	Winter to April.	1/2 to 1
Clover, Persian.	60	6 to 8.	.....	Feb., March.	.....
Clover, Sweet, white or yellow.	60	12 to 15.	637200	Each spring, Aug., Sept.	1/2 to 1
Clover, Sweet, white (unhulled).	30	25 to 30.	256500	Oct. to Feb.	1
Clover, White Dutch.	60	2 to 5.	202500	March to April.	1/2 to 1
Corn.	56	8 to 12.	675000	Late Spring.	1 to 1 1/2
Corn, for Silage.	56	10 to 15.	1350	Late Spring.	1 to 1 1/2
Corn, Pop.	56	3 to 5.	1350	May, June.	1
Crested Wheat Grass.	22	10 to 12.	3150	Each Spring, Aug., Sept.	1/2
Crotalaria.	40	12 to 15.	270000	April, May, June.	3/4
Dallis Grass.	10	15 to 20.	36000	March, April, May.	1/2
Fescue, Alta or Ky. 31.	24	14 to 18.	225000	Each Spring, each Fall.	1/2
Fescue, Meadow.	24*	15 to 20.	225000	Each Spring, Aug., Sept.	1/2
Flax.	52	30 to 50.	216000	March, April.	1/2
Johnson Grass.	28	20 to 30.	80100	April to July.	1
Lawn Grass mixed.	.....	125.	130500	Each Spring, each Fall.	1/2
Lespedeza—Common.	25	25 to 30.	.....	Each Spring after frost.	1 to 2
Lespedeza—Kobe.	25	20 to 25.	337500	Each Spring after frost.	1 to 2
Lespedeza—Korean.	25	20 to 25.	337500	Each Spring after frost.	1 to 2
Lespedeza Sericea (hulled).	60	25 to 30.	236250	Early Spring.	1 to 2
Millets—for hay.	50	30.	369000	Late May to each July.	1/2 to 1
Millets—for seed.	50	15.	211500	Late May to each July.	1/2 to 1
Millets—Japanese.	35	20 to 30.	211500	Late May to each July.	1/2 to 1
Mung Beans.	60	15.	144000	May, June, July.	1/2 to 1
Oats.	32	64 to 96.	10800	Feb., March, April.	1 to 1 1/2
Orchard Grass for Hay, Pasture.	14*	15 to 20.	12600	Each Spring-Fall.	1/2 to 1
Orchard Grass for Seed.	14*	10 to 14.	648450	Each Spring-Fall.	1/2 to 1
Pasture Mixtures.	.....	30 to 40.	648450	Each Spring-Fall.	1/2 to 1
Peanuts.	22	35 to 40.	.....	May, June.	1/2 to 2
Peas, Austrian Winter.	60	30 to 35.	900	Aug., Sept., Oct.	2
Peas, Canada Field (broadcast).	60	120 to 150.	1800	Early Spring.	1 to 2
Peas, Canada Field, with oats.	60	75 to 90.	1800	Early Spring.	.....
Peas, Cow, broadcast or drilled.	60	60 to 90.	.....	May or June.	1 to 2
Peas, Cow, in rows.	60	30 to 45.	3600	May or June.	1 to 2
Peas, Cow, in drill with corn.	60	20 to 30.	3600	May or June.	1 to 2
Rape, broadcast.	50	5 to 8.	.....	Each May to late July.	1/2 to 1 1/2
Rape, drilled.	50	4 to 5.	155700	Each May to late July.	1/2 to 1 1/2
Red Top, Solid Seed.	14*	6 to 8.	155700	April or each Sept.	1/2
Red Top, Unhulled.	14*	20 to 25.	4950000	April or each Sept.	1/2
Reed Canary Grass.	44	10 to 12.	.....	Each Spring, Aug., Sept.	1/2
Rye, Grain.	56	84 to 112.	540000	Sept. to Nov.	1 to 1 1/2
Rye, Grass.	24	28 to 35.	18000	April or each Sept.	1/2
Sorghum Forage, broadcast or close-drilled.	50	50 to 75.	24750	May, June.	1 to 1 1/2
Sorghum, forage, 42" rows.	50	4 to 8.	24750	May, June.	1 to 1 1/2
Sorghum, grain, 21" rows.	56	6 to 12.	24750	May, June.	1 to 1 1/2
Sorghum, grain, 42" rows.	56	3 to 6.	24750	May, June.	1 to 1 1/2
Soy Beans, broadcast or drilled.	60	90 to 120.	4050	May, June.	1 to 2
Soy Beans, in rows.	60	30 to 45.	4050	May, June.	1 to 2
Soy Beans, in drill with corn.	60	15 to 20.	.....	May, June.	1 to 2
Sudan Grass, broadcast.	40	20 to 30.	54000	Late May to early July.	1/2 to 1
Sudan Grass, drilled.	40	10 to 15.	54000	Late May to early July.	1/2 to 1
Sunflower.	32	6 to 8.	27000	May.	1 to 2
Tall Meadow Oat Grass.	14	15 to 20.	148500	Early Spring, Aug., Sept.	1/2
Timothy.	45	8 to 10.	1125000	Spring & Fall.	1/2
Velvet Beans.	60	15 to 30.	900	May, June.	1 to 2
Vetch, Winter or Hairy.	60	40 to 60.	16'00	June to Sept.	1 to 2
Vetch, Spring.	60	40 to 60.	8550	March or April.	3 to 4
Wheat, Winter.	60	75 to 90.	11250	Sept. to Nov.	1 to 1 1/2

† The number of seeds per pound varies widely between varieties and lots of same species, but figures given are approximately average.



GARDENS
FOR SHADE

Although few flowering plants will thrive in dense shade, where there is no sunlight at all, many of them will grow reasonably well. The average yard, however, has few spots which do not receive flickering sunlight some part of the day.

A good shade border garden could include **Anemone**, **Cardinal Flower**, **Columbine**, **Pansy** and **Primrose**. **Dwarf Phlox** and **Ferns** make beautiful paths under trees and **Violets** will grow almost anywhere.

If your shady spots receive partial sun sometime during the day, plant a border of **Snapdragons**, **Bachelor's Buttons**, **Phlox**, **Alyssum**, **Calceolaria**, **Campanula**, **Nasturtium** and **Petunia**.

These seeds can be started in summer and transplanted: **Ageratum**, **Calendula**, **Nicotiana**, and **Zinnias**.

Don't expect masses of bloom but enjoy each flower for its own beauty. The white varieties of any plant family will always do best in shady places. When a plant self-sows, it is an indication that the spot is to its liking. Whether it is your favorite flower or not, accept it, for it will thrive in its chosen location.

Provide good drainage, as soil stagnation comes easily in dusky places. Lighten heavy earths with sand.



ROCK GARDENS

When planning a rock garden, select only plants that appear at home among stones, and be sure that they are adapted to the locations you have chosen.

A good mixture of soil for your rock garden is one of equal parts of ordinary top soil, sharp sand and some kind of humus, preferably well rotted manure. Drainage is important and for best results set each stone so that its top slants inward and downward. Be sure to have deep pockets of earth between rocks for planting. Press soil well back under the rocks.

As a general rule your local stone should be used, even though it may not be ideal for the purpose. The reason being, that by using local stone there is less danger of constructing a garden that looks out of place in its setting. Weather-worn limestone of irregular shapes is perhaps the most pleasing material for construction and easiest to work with.

Below are a few varieties of seeds suitable for your rock garden.

African Daisy, **Alyssum**, **Arctotis**, **California Poppy**, **Candytuft**, **Dianthus**, **English Daisy**, **Forget-Me-Not**, **Linum**, **Lobelia**, **Phlox (dwarf)**, **Portulaca**, **Swan River Daisy** and **Statice**.

FLOWER GARDEN PLANNING

KEY—For classification of flowers by purpose, location, etc., see the second column below. The meaning of the key letters in this column follows:

A—For dry, hot locations	E—For edging	I—For their fragrance
B—For a succession of blooms	F—For the rock garden	J—For porch or window boxes
C—For shady locations	G—For their foliage	K—Climbing vines
D—For poor soil	H—Everlasting for winter bouquets	L—For backgrounds

	Height (Inches)	Suitable for	Average Days to Germinate	Approx. Time of Bloom	Shape of Plant	Culture (Page 31)
Ageratum	4-12	E J F	5-10	10 Wks.	bushy	I
Alyssum, Sweet	2-12	B C D E F I J	5-10	6 Wks.	spreading	VI
Antirrhinum	12-60	C I L	20-25	3-4 Mos.	bushy	I
Aquilegia	18-36	C E F	15	3 Mos.	branchy	VI
Balsam	14-20	A E	10-12	6 Mos.	erect	II
Calendula	12-36	D	10-14	12-14 Wks.	bushy	II-IV
Campanula	18-24	F	8-15	10-12 Wks.	bushy	VIII
Candytuft	6-18	B F I	5-10	8-10 Wks.	bushy	
Centaurea	18-36	A B C D E I J	5-20	3-4 Mos.	erect	II
Chrysanthemum	24-36	A E	5-20	8-10 Wks.	bushy	II-IV
Celosia	12-36	D E H	20-25	10 Wks.	bushy	I-II
Cosmos	36-60	A	5-15	10-12 Wks.	bushy	II-IV
Coreopsis	18-36	A B D	10-20	4-5 Mos.	bushy	VI
Dahlia, Dwarf	14	F	10	3-4 Mos.	bushy	I-II
Delphinium	36-72	L	15-21	3-4 Mos.	tall	VI
Digitalis	30-48	F	10-20	3-4 Mos.	erect	VIII
Dianthus	4-15	F I	5-10	12 Wks.	bushy	I-VIII
Eschscholtzia	10-12	C D F	5-12	12-15 Wks.	bushy	III
Four O'Clock	24-30	A D	5-10	3-4 Mos.	bushy	III
Gaillardia	18-30	D	15-20	2-3 Mos.	bushy	II-VI
Godetia	12-24	C D	15-20	2 Mos.	erect	I-II
Gypsophila	18-36	B H	15-20	8-10 Wks.	branching	I-VI
Helichrysum	24-36	H	5-10	3 Mos.	bushy	II
Hollyhock	48-84	L	5-20	10 Wks.	slender	VI-VIII
Kochia	30-36	A B	15-18	Foliage	bushy	III
Larkspur, Annual	30-72	L	15-20	10-12 Wks.	tall	II-IV
Lathyrus	60-72	I K	25-40	2-3 Mos.	vine	II
Lobelia	4-8	E J	10	10-12 Wks.	bushy	I-V
Marigold	8-36	B J	5-8	6-8 Wks.	bushy	I-II
Mignonette	10-12	B I		3-4 Mos.	erect	III
Moon Flower	12 ft. up	I K	5-8	4-5 Mos.	vine	II
Morning Glory	12 ft. up	A K	5-8	3-4 Mos.	vine	III-V-VII
Nasturtium	12-36	D E F K	8-15	2-3 Mos.	bush.vine	III-V
Nigella	10-18	B F	10-15	10-12 Wks.	bushy	II
Nicotiana	30-48	I	20-25	10-12 Wks.	branchy	I-II
Pansy	4-8	C E F	10-15	10-12 Wks.	clump	I-II-VIII
Petunia	10-24	D E F J	18-20	10-12 Wks.	bushy	I-IV
Phlox	10-18	A B C F I J	20-25	8-10 Wks.	bushy	II
Poppy	18-36	B	20	12-15 Wks.	erect	IV-VI
Portulaca	4-6	A D E F J	18-20	6 Wks.	spready	III-IV
Salvia	12-42	A	15-25	3-4 Mos.	bushy	I
Scabiosa	18-30	I	18-20	2-3 Mos.	bushy	III-IV
Stocks	12-24	I	5-15	12-14 Wks.	bushy	I-IV
Schizanthus	18-36	C E	20-25	6-8 Wks.	bushy	II-IV
Sweet Pea	36 up	K	15-20	10-12 Wks.	vine	II-IV
Sweet William	12-24	F	10	12 Wks.	bushy	VI
Verbena	6-12	E F J	8-10	12 Wks.	spready	
Wallflower	12-18	I	5-12	2-3 Mos.	bushy	I-V
Zinnia	12-36	A F	5-10	6-8 Wks.	bushy	I-II

FLOWER



CULTURE

One of the important problems in the garden is that of maintaining a continuous show of bloom. This calls for the use of several different types of annuals, such as those that must be planted early to grow in cool weather. (**Culture IV**) and those which bloom later in summer heat (**Culture I and II**). If some of the cool-weather annuals from **Group IV are sown in mid-summer** and kept well watered, they will grow slowly until the cooler days of fall start them into more active growth. These will produce late flowers. Quick-growing annuals from **Group II** may also be sown at intervals for a succession of bloom during the summer.

Culture I

These flowers need a long season and must be started indoors if a full blooming period is to be had. If early bloom is not important, they will bloom later in the summer when sown directly in the garden. Some gardeners sow both ways to obtain a succession of flowers.

Culture II

These are the quicker-growing annuals that can be sown directly in the garden and will bloom in time to make a good display for most of the summer. If wanted especially early, they should be started as directed indoors in seed beds or flats. Some flower seedlings are rather delicate. Extra care in preparing the seed bed will pay dividends in better plants. Prepare soil with a liberal amount of mixed fertilizer and organic matter and dig it in. Rake the surface until it is smooth and pulverized. Sow the seed at a depth equal to three times the diameter of the seed. Fine seed can be spread on the surface and pressed in without covering. Keep soil moist by light spraying until the seedlings have formed the first true leaves. When they are large enough to handle, they may be transplanted to other parts of the garden.

Culture III

These flowers do not transplant well. They should be planted where they are to bloom. Sow as soon as the weather begins to warm in the spring. **Otherwise the culture is the same as II.** Sow seed thinly or remove the smaller plants after they are up. These can be handled as pot-grown plants as in **Culture VII**.

Culture IV

These flowers are unusually hardy annuals that can withstand very cool weather. They are often sown late in fall so they can start growing the first warm days of spring. If not sown in the fall, they should be planted as early in the spring as possible. Fall sowing gets the seeding job out of the way before the spring rush.

Culture V

These flowers, while garden subjects, are also useful for winter-flowering house plants. **For garden use, handle as in Culture II.** For winter flowering indoors, plant fairly late in the season and transplant into small pots as soon as they are large enough. Keep moving them to larger pots as roots fill the soil until they are finally in six-inch pots. Annuals in pots should have at least six hours of direct sunlight daily if they are to flower.

Culture VI

Perennials can be seeded at almost any time of the year. Best periods are early in the spring or in early summer when the rush of spring work is over. A cold frame or sheltered bed which can be shaded from the direct sun is best. Prepare soil thoroughly with plenty of organic matter. A loose, friable soil will produce a thick mat of roots so that the seedlings will transplant more easily. Perennial seedlings are rather weak growers needing extra care. In covering the drills in which the seeds are sown, use either pure, clean sand or a mixture of half sand and half peat moss. This prevents packing of the soil over the seeds. Always water with a fine spray.

As soon as the second leaves form, seedlings may be transplanted into their permanent position. Or, if more convenient, they may be left in the seed bed until the following spring. Under this culture, only a few species will bloom the first year and they will not produce normal flowers until the following year. Planting earlier does increase the chances for flowers the first year. But, if it is more convenient, Culture I may be used. Delphinium seed is often started in August to take advantage of the cooler nights for the seed will not grow when the soil temperature is above 77 degrees.

Culture VII

These varieties need a longer growing season than can be given them outdoors. And because they do not transplant well, they must be started in pots and set out without disturbing the roots. **Otherwise Culture is the same as I.** The use of plant bands allows you to set the seedlings out without disturbing the roots. The bands soon rot away and the seedlings will grow as though started in the garden.

If clay pots are used, the excessive drying can be avoided by placing the pots in a flat and filling the space between them with damp peat moss or vermiculite. Be sure to keep this material moist or it will draw moisture from the pots.

Culture VIII

These flowers are biennials. They make a leafy growth the first year but do not flower. The leafy growth of the first year forms food for blooming the following year. The flowers appear the second year and then the plant dies.

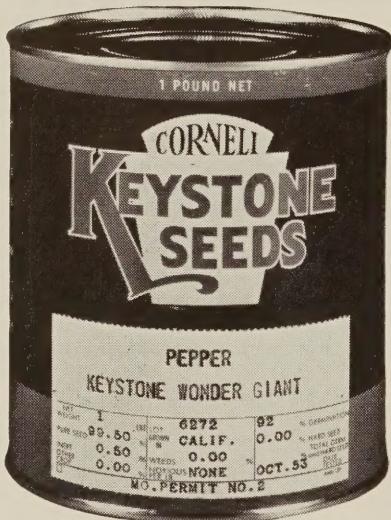
This means that a continuing show from biennials must be provided by starting new plants every year to replace those that are flowering.

Biennials are handled in the same way as perennials except that they are started early in the spring to allow the plant to store as much food as possible for the next year's bloom.

Many gardeners start biennials in the vegetable garden or special starting bed and then transplant the ones needed to the flower garden the following spring. During winter, biennials should be given the same treatment as perennials.

Pansies are tender perennials that are treated as annuals or biennials. When grown as annuals, they should be started indoors about six weeks before time for planting out in early spring. When grown as biennials, the seed is started in late summer and the plants carried over winter in protected spots where extremes of temperature and moisture are avoided. Mulching or the use of frames may be necessary in your particular garden. Pansies do best under conditions of constant, moderate moisture, partial shade and a humus-rich soil. Pinching off old flowers will prolong the flowering season.

CANNED SEEDS



We have pioneered this method of packaging garden seed and after 15 years' testing and over ten years' actual use, it has more than proved its worth as the very best type of container. Only the tin can provides maximum protection against mixture, insect damage, moisture and early loss of germination for the seeds of cabbage, tomato, onion, pepper, eggplant and other valuable kinds.

While this package is especially important in warm climates, the protection and convenience offered make it very appropriate for use in the north, south, east and west. The tin can has become our regular package for certain specialty items and is available in the 1-pound size for almost all kinds of seed we carry.

A GARDEN IN COLOR

Combinations in color for the annual garden are unlimited. A color scheme which is said to be restful, is the blue and lavender garden. Listed alphabetically, here are a few of the more popular annuals which may be used for this.

Ageratum—Midget Blue; **Alyssum**—Royal Carpet; **Anchusa**—Blue Bird; **Bachelor's Buttons**—Blue Boy; **Didicus** (Blue Lace Flower); **Larkspur**—Regal Dark Blue and Lilac; **Linum**—(Flowering Flax) Perennial Blue; **Lobelia**—Crystal Palace; **Morning Glory**—Heavenly Blue; **Nemophila** (Baby Blue Eyes); **Petunia**—Blue Bee; **Salvia** (Flowering Sage)—Blue Bedder; **Scabiosa**—Blue Moon and **Vinca** (Perwinkle). A border garden of white annuals planted against a background of shrubs is always beautiful. A few we might suggest are:

Alyssum—Carpet of Snow; **Centaurea**—Snow Man; **Candytuft**—White Hyacinth; **Gypsophila**—(Baby's Breath)—Annual White; **Larkspur**—Regal White; **Mignonette**; **Nicotiana**; **Petunia**—Snow Storm; **Scabiosa**—Peace; **Shasta Daisy** and **Verbena**, Mammoth White.

Or you might want to have your garden in blues, yellows and white. If so, here is a striking border:

Plant the soft yellow **Marigolds**, **Zinnias** and **Annual Phlox** in drifts or long masses throughout the border. As a background use the blues and lilacs of **Larkspur**. Along the border carry out your blues with **Scabiosa**—Blue Moon; **Salvia**—Blue Bedder, **Didiscus** planted near the pure white **Centaurea** (Bachelor's Button) or behind the giant white **Hyacinth** **Candytuft**.



If you don't sow anything, you won't harvest anything.



If you sow any ol' thing, you will also harvest any ol' thing.



But—if you sow Keystone seeds, you will have a Keystone Harvest!

